



It is a privilege to live in Coos County with its great natural beauty, abundant resources, and temperate climate. It would seem the ideal place to live a healthful lifestyle, with ample varieties of wholesome food, plentiful opportunities for outdoor recreation and physical activity, and a resourceful, community-centered population. Yet, Coos County ranks as one of the unhealthiest counties in Oregon. What is happening in Coos County and what can we all do to help achieve our vision of being the healthiest place to live in Oregon? This Community Health Assessment provides a foundation for understanding the health status and health needs of Coos County residents.

Coos County Public Health
 1975 McPherson Avenue, #1
 North Bend, OR 97459
 (541) 751-2400

[This page intentionally left blank.]

2013 Community Health Assessment Committee

**Stephen Brown, ND, MPH, Coos County
Public Health Department**

Serves as the Tobacco Prevention Program Coordinator for Coos County. Expertise in public health prevention through policy, systems and environment change.

**Lynda Buford, Volunteer Public Health Nurse
and Past Accreditation Assistant, Coos
County Public Health Department**

Serves as a nurse and accreditation assistant for local public health, and possesses experience in health assessments, public health education, public health and home health nursing.

**David Geels, LPC, Director, Coos County
Mental Health Department**

Serves as Director of community mental health; providing services to low-income children and adults with chronic mental illness. Previously worked as Quality Assurance Manager.

Linda Furman Grile, South Coast Hospice

Serves as Executive Director for Community-based Hospice program; possessing expertise and skills in program and systems development. Hospice/End of Life (EOL) educator with a long-term care background as an Oregon Nursing Home Licensed Administrator assisting patients and families through EOL transitions as a group facilitator. Possesses strength and skill at grant writing, assessments, and team building.

**Melody Gillard-Juarez, Grants Manager,
Southern Coos Health District; Executive
Director, Southern Coos Health Foundation**

Serves on the hospital Leadership Team working with clinical and non-clinical staff. Has expertise in grant proposals and grant-funded projects, and community relations. Executive director of nonprofit Foundation in support of Southern Coos Hospital.

**Kelle Little, RD, CDE, Health and Human
Services Administrator, Coquille Indian Tribe
Community Health Center**

Provides administrative oversight for all Health and Social Service Programs including but not limited to the Medical Clinic, Head Start, Indian Child Welfare, Prevention and Contract Health Services. Possess expertise in health care

delivery and improving health status for American Indians and Alaskan Native people.

**Linda Maxon, Executive Director, Bandon
Community Health Center**

Provides administrative oversight for all clinical operations, programs and community activity sites serving Medicaid, Medicare, privately insured, private pay/uninsured patients. Possess expertise in non-profit leadership and senior-level human resources in non-profit, private and public entities.

**Reneé Menkens, RN, MS, Community
Representative**

Serves as a community participant with a focus on the needs of mental health clients. Has expertise and interest in public health care for vulnerable populations and how Coordinated Care Organizations can improve the health of Coos County. Reneé is an instructor for Oregon Health and Science University School of Nursing and works as a RN in the Bay Area Hospital Acute Psychiatric Unit.

**Kay Metzger, Innovator Agent, Oregon Health
Authority**

Serves as the liaison between the State of Oregon and Western Oregon Advanced Health to support the development of the Coordinated Care Organization and facilitate health system transformation. Twenty-two years experience working with the administration of Medicaid programs, specifically for seniors and people with disabilities.

**Stephanie Polizzi, MPH, RD, CHES, Oregon
State University Coos County Extension
Service**

Registered dietitian and health education specialist providing nutrition and wellness education in community venues. Specializes in disease prevention/reversal and provides teaching and resources to hospitals, clinics, schools and worksites in Coos and Curry. As Regional Health Education Coordinator, creates opportunity for professional development of health professionals and local students wishing to study in the health field.

Lonnie Scarborough, RN, BA, Western Oregon Advanced Health

Served in a Leadership role as a nurse for 25 years and has expertise in working with Hospitals, FQHC's, Rural Clinics, Home Health, and Long Term Care Facilities. Has expertise in developing and implementing successful quality programs and serves as Director of Quality and Accountability for WOAAH.

Frances Smith, Past Administrator, Coos County Public Health Department

Served as the administrator for local public health and contributed knowledge and expertise relating to community services available to low-income individuals and families and underserved populations.

Sannie Warbis, RNC, BS, Interim Director of Quality, Bay Area Hospital

Serves as the interim Director of Quality for Bay Area Hospital. In addition, she is involved in the prenatal task force, Cancer Coordinating Team, Readmissions Prevention Task Force, and on the Healthy Start Board and Institutional Review Board. Possesses 29 years of leadership nursing experience, and has expertise in teen pregnancy prevention, strategic planning, and needs assessment.

Nikki Zogg, PhD, MPH, Director, Coos County Public Health Department

Serves as the Administrator for local public health, and possesses an expertise in organizational leadership, quality improvement, strategic planning, health assessments, data collection and analysis, and biostatistics.

WOAH Oregon Health Plan Members – Survey Participants

A participant survey was mailed to 4,800 members. The survey collected information regarding satisfaction with Oregon Health Plan services. 656 surveys were returned and analyzed.

Finalized: August 2013

Direct questions or comments to:

Nikki Zogg, PhD, MPH
Director
Coos County Public Health
1975 McPherson St. Suite #1
North Bend, OR 97459
nzogg@co.coos.or.us



Table of Contents

- 2013 Community Health Assessment Committeei**
- Executive Summary 1**
- Methodology 2**
- Community Profile..... 3**
- Demographics..... 9**
- Births 10
- Death..... 10
 - Fetal Death* 10
 - Premature Death*..... 11
- Health Issues..... 15**
- Illness, Injury and Disability 15
 - Illness* 15
 - Injury*..... 19
 - Disability*..... 21
- Determinants of Health..... 22**
- Socioeconomic Factors 22
 - Employment* 22
 - Income/Poverty* 22
 - Education*..... 23
 - Housing*..... 23
 - Transportation*..... 24
- Access to Healthy Foods 25
 - Food Insecurity* 25
- Access to Safe Places to Live, Work and Play..... 26
 - Community Safety* 26
 - Violent Crime Rate*..... 26
- Social and Emotional Support..... 26
- Behavior 27
 - Immunization Uptake* 27
 - Tobacco Use* 28
 - Alcohol and Drug Use* 29
 - Sexual Activity Among Youth*..... 30
 - Nutrition* 30
 - Physical Activity*..... 31
- Environmental Factors..... 32
 - Commuting to Work* 35
- Community Survey Results 36
- Existing Resources 38**
- Healthcare..... 38
 - Healthcare Capacity* 38
 - Insurance Coverage* 39
 - Prenatal Care*..... 40

<i>Safety Net Clinics</i>	40
<i>Tribal Health</i>	41
<i>Nutrition and Health Education</i>	42
<i>Alternative Care</i>	42
<i>Access to End of Life Services</i>	42
<i>Hospitals</i>	43
Domestic Violence and Sexual Assault Resources	45
Oral Health.....	45
<i>Adult Dental Care</i>	45
<i>Child Dental Care</i>	46
Quality of Care	47
Anticipated Short-term Community Healthcare Needs.....	48
Places to Recreate.....	48
<i>Parks and Beaches</i>	48
<i>Walkable/Bikable Community</i>	48
Places of Faith	49
Summary	50
Identified Health Needs	54
Acronym Definitions	56
Appendix A: WOA Oregon Health Plan Consumer Survey	58
Appendix B: Coos County Health & Care Profile for Newly Eligible Oregonians	62

Executive Summary

A Community Health Assessment (CHA) is a collaborative effort by community stakeholders to collect and analyze local-level data in an effort to determine the health status and needs of a community.

The team of community stakeholders who worked on this assessment developed a mission: *to ensure people in Coos County live long, healthy and productive lives*. The stakeholders elected to use a modified Mobilizing for Action through Planning and Partnerships (MAPP) model to guide their assessment efforts. Data were collected from local, state and national sources; including but not limited to surveys, public assistance programs, mandatory reporting mechanisms, vital statistics and censuses. After a critical review of the data presented in this assessment, the team of stakeholders identified eight priority areas.

Top 8 Priorities for Improving the Health of Coos County Residents

Access to Healthcare	Mental Health
Chronic Illness Management	Chronic Illness Prevention
Dental Health	Socioeconomic Disparities
Fall Prevention	
Maternal and Child Health	

Through the development of a CHA and subsequently a Community Health Improvement Plan (CHIP), community stakeholders will align their strategic plans and resources to address areas for improvement. Where feasible, stakeholders will leverage existing efforts and resources towards community-wide goals and objectives outlined in the CHIP. Through this targeted effort, the committee hopes that improvements can be made efficiently, effectively and in a timely manner.

This assessment is broken out into eight primary areas: Methodology, Community Profile, Demographics, Health Issues, Determinants of Health, Existing Resources, Summary, and Identified Health Needs.

Methodology

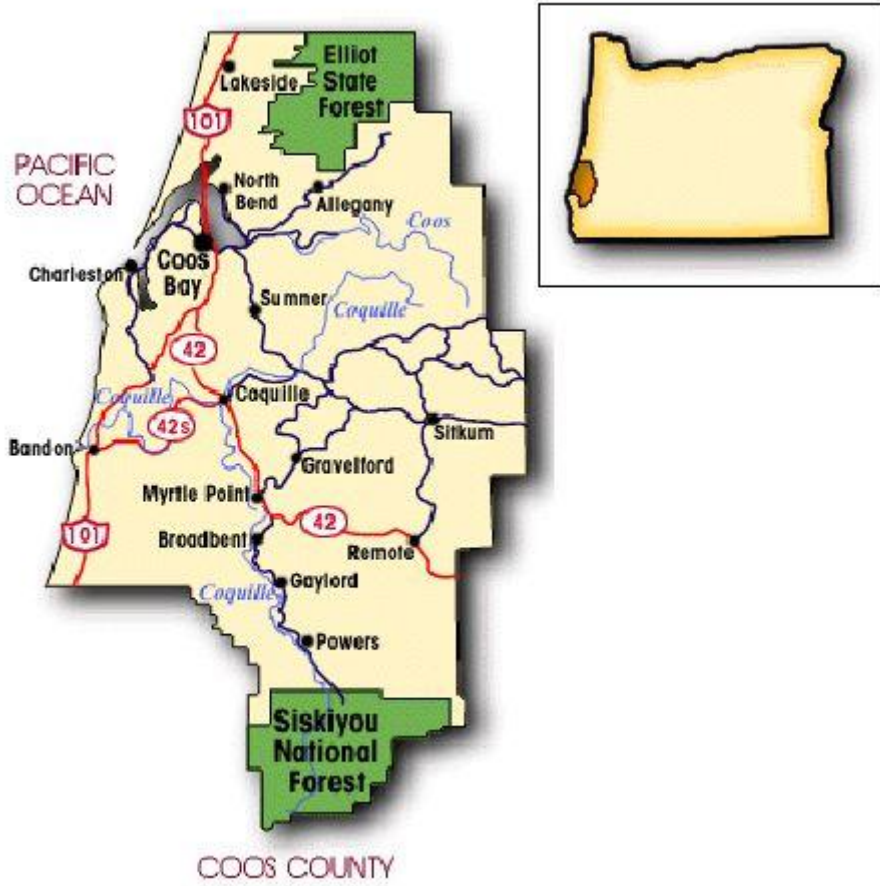
This Community Health Assessment (CHA) was conducted using a modified Mobilizing for Action through Planning and Partnerships (MAPP) model. MAPP is a community-driven strategic planning tool for improving community health. The process is facilitated by public health leaders and is intended to help communities apply strategic thinking to prioritize public health issues and identify resources to address them. MAPP is an interactive process that can improve the efficiency, effectiveness, and ultimately the performance of local public health systems.



Figure 1: MAPP Model

The modified aspects of MAPP implemented in the Coos County Health Assessment project were in the area of assessment. Committee meetings were used in lieu of conducting the Community Themes and Strengths Assessment and the Forces of Change Assessment. In addition, some elements of the MAPP process will not be addressed in the CHA, but in the CHIP. The CHIP describes the Strategic Issues and Goals/Strategies steps of the MAPP model as they pertain to improving health in Coos County.

Community Profile



INTRODUCTION

Coos County, established December 22, 1853, is located on the southern Oregon Coast. It was named after a local Indian tribe, the Coos, which has been translated to mean “lake” or “place of pines.” The county stretches from the Lakes of Tenmile to the Cranberry Bogs of Bandon; encompassing nearly 1,600 square miles. Most of the population can reach the Pacific beaches within minutes. Coos County is comprised of both rural and frontier populations. Coos County has seven cities and several smaller communities. The seven cities include Bandon, Charleston, Coos Bay, Coquille, Lakeside, Myrtle Point and North Bend.

POPULATION

In 1860, the first census of Coos County was taken and at that time an estimated 445 people resided in the county. Today, Coos County is home to an estimated 63,043 residents. The majority of the population is between the ages of 45 and 69 years. The average age in Coos County is 47.3 years. Males make up about 49.3% of the population. The majority of the population is White (89.8%). The remainder of the population self-identifies as American Indian (2.5%), Asian (1%) or Black (0.4%). Nearly 5.5% of the population are Hispanic.

Most of Coos County residents live in a household while the remainder either reside in an institutionalized setting (0.9%) or a non-institutionalized setting (0.7%). In 2012, an estimated 81 households were homeless (N=112 adults and N=28 children <18 years). There are 12,810 husband-wife family households in Coos County. One thousand two hundred and ninety three households have a male, but no wife present and 2,754 households have a female, but no husband present. In Coos County, approximately 53.3% of males 15 years of age and over are married and 51.9% of females 15 years of age and over are married. Only 24.2% of Coos County households had individuals under 18 years of age residing in them. The average household size is 2.29 individuals.

There are 8,950 civilian veterans living in Coos County. Just over 2,000 residents report being foreign-born and 856 are not U.S. citizens. The majority of foreign-born are from Latin America (N=788), Europe (N=516), Asia (N=413) and Northern America (N=202). The remainder are from Oceania or Africa.

EDUCATION

Education is a leading health indicator. The more education attained the more likely a person is to live a longer and healthier life. Education attainment is also linked to socioeconomic status. About a quarter of Coos County residents have a college degree (Table 1). Almost 3% (N=1,342) of adults in Coos County have less than a 9th grade education. An additional 9.7% completed some high school education, but do not have a diploma.

Table 1: Education Attainment Percentages for Coos County and Oregon

Education	Coos County	Oregon
High School Graduate or Higher	87.4%	88.9%
Some College, no Degree	29.8%	25.2%
Associate’s Degree	8.1%	8.1%
Bachelor’s Degree	12.7%	18.4%
Graduate or Professional Degree	5.9%	10.6%

U.S. Census – American Community Survey 2007-2011

Reading and math proficiency are often early indicators of education success. From 2011 to 2012, reading and math proficiency scores declined among both 3rd and 8th graders (Table 2).

Table 2: Reading and Math Proficiency at 3rd and 8th Grades, 2011 and 2012

Proficiency	2011		2012	
	3rd	8th	3rd	8th
Reading	81.3%	63.6%	67.0%	55.3%
Math	56.2%	57.5%	49.8%	49.8%

Kids Count, 2013. Retrieved from <http://datacenter.kidscount.org/data/bystate/stateprofile.aspx?state=OR&group=Grantee&loc=5348&dt=1%2c3%2c2%2c4>

There are six school districts in Coos County (Table 3). Their enrollment numbers range from 102 to 3,430. The student-to-teacher ratios are high in all of the districts except for Powers. Overall, students in the Bandon School District scored the highest in the 2011/2012 academic assessments.

Table 3: Coos County School District Data, 2011/2012

School District	Number of Schools	Number of Students	Student/Teacher Ratio	Performance assessment Results				
				Exceeds	Meets	Nearly Meets	Low	Very Low
Bandon	3	747	18.4	13.6%	55%	15.3%	15.1%	1%
Coos Bay	8	3,430	22.6	9.4%	43.7%	17.5%	27.4%	2%
Coquille	4	866	20.1	10.8%	47.1%	17.8%	23.1%	1.1%
Myrtle Point	2	692	18.2	4.5%	41.2%	17.5%	34.2%	2.5%
North Bend	7	2,669	23.2	12.8%	34.1%	19%	31.5%	2.7%
Powers	2	102	8.9	7.9%	49.2%	19%	23.8%	0%

Find The Best, 2013. Retrieved from <http://school-district.findthebest.com/d/a/Oregon/Coos-County>

There are four vocational schools with campuses in Coos County and over 30 online post-secondary education institutions available for those with access to the internet. The vocational schools are Oregon Coast Culinary Institute, Hair We Are Beauty College, Dee LaVon School of Massage and H & R Block Income Tax School.

Coos County is home to Southwestern Oregon Community College (SWOCC). SWOCC serves the educational and cultural needs of students and citizens by providing access to quality education in a professional and engaging environment that supports innovation, sustainability and lifelong enrichment. Approximately 2,120 students attend SWOCC. The college offers on-campus, online and hybrid (uses an online component to replace some of the face-to-face instruction time) opportunities for students. In addition to SWOCC, there are two additional post-secondary academic institutions in Coos County: Oregon Institute of Marine Biology and Linfield College Adult Degree Program.

ECONOMY

Today, forest products, tourism, fishing and agriculture dominate the Coos County economy. However, the service industry is replacing the former lumber-driven economy. Bandon Dunes Golf Resort, north of Bandon and south of Coos Bay, attracts tourists and golfers from around the world. Boating, dairy farming, myrtlewood manufacturing, shipbuilding and repair, and agriculture specialty products, including cranberries, also play an important role in the county's economy.

There are some underutilized resources in the county. There are several port districts in the county: Port of Coos Bay, Port of Coquille River and Port of Bandon. Coos Bay is considered the best natural harbor between San Francisco and the Puget Sound. Gold mining drew people to explore and exploit the mineral resources of the county in the 19th century. Today, there are rich deposits of iron ore, lead and coal that await development.

EMPLOYMENT

Nearly 55% (N=28,616) of Coos County residents report being in the labor force: 48.1% are employed, 6.0% are unemployed and 0.4% are in the Armed Forces (U.S. Census, 2010). Nearly one-third (29.8%) of employed individuals 16 years of age and over work in occupations related to management, business, science and arts. Twenty-two percent work in service occupations and 25.2% work in sales and office occupations. The remainder of workers are employed in natural resources, construction, and maintenance occupations (11.9%) or production, transportation, and material moving occupations (10.9%). Private wage and salary workers (71.4%) primarily support the workforce. Government workers make up 17% of the workforce and 11% are self-employed in their own, unincorporated, businesses. Only 0.4% of the workforce is working in unpaid family jobs.

INCOME

Researchers believe that changes in the labor market and, to a certain extent, household composition affected the long-run increase in income inequality. The wage distribution has become considerably more unequal with workers at the top experiencing real wage gains and those at the bottom real wage losses. These changes reflect relative shifts in demand for labor differentiated on the basis of education and skill. At the same time, changes in society's living arrangements have taken place also tending to exacerbate household income differences. For example, divorces, marital separations, births out of wedlock, and the increasing age at first marriage have led to a shift away from married-couple households to single-parent families and nonfamily households. Since non-married-couple households tend to have lower incomes and incomes that are less equally distributed than other types of households (partly because of the likelihood of fewer earners in them), changes in household composition have been associated with growing income inequality.

Coos County's Gini coefficient (ratio) from 2005-2007 was 46.7 and has declined to 43.5 from 2009-2011. The Gini coefficient of income inequality represents the inequitable distribution of income in a community by household, and can range between 0 and 100. A value of 100 indicates that all the income in a county is concentrated in one household, while a coefficient of 0 indicates a completely equal distribution of income among households. Income has become more equally distributed in Coos County over the past several years; however, low-wages and higher unemployment have created a trend towards poverty, not increased wealth as one might assume.

Some of the factors influencing this trend include the decline in the availability of blue-collar jobs due to federal and state regulation as well as technological advances that have replaced people with machines and outsourcing of jobs to countries with cheaper workforces. Coos County has been hit particularly hard by this trend because the volume of jobs have remained relatively stagnant or declined (Table 4).

Table 4: Household Income and Poverty Data for Coos County and Oregon, 2009-2011

Income Data	Coos County	Oregon
Median Household Income	\$37,258	\$48,377
All People Below Poverty Level	17.6%	15.8%
People below 200% of FPL	40.0%	36.1%
Below Poverty Level < 18 years of age	22.9%	21.3%
Below Poverty Level ≥ 65 years of age	7.9%	7.9%

U.S. Census - American Community Survey 2009-2011

HEALTH

The Coos County Health Rankings (Table 5) illustrate that much of what affects health occurs outside of the doctor’s office. Based on data available, the rankings are unique in their ability to measure the overall health. Coos County ranks 28 of 33 for overall health when compared to all other Oregon counties.

Table 5: Coos County Health Ranking, 2013

	Coos County	Oregon	National Benchmark*	Trend	Rank (of 33)
HEALTH OUTCOMES					28
Mortality					
Premature death	8,176	6,076	5,317	Worse ¹	
Morbidity					23
Poor or fair health	16%	14%	10%		
Poor physical health days	3.9	3.7	2.6		
Low birth weight	6.6%	6.1%	6.0%		
HEALTH FACTORS					30
Health Behaviors					32
Adult smoking	27%	17%	13%		
Adult obesity	30%	26%	25%	No change ²	
Physical inactivity	22%	18%	21%	Worse ³	
Excessive drinking	18%	16%	7%		
Motor vehicle crash death rate	16	12	10		
Sexually transmitted infections	295	322	92		
Teen birth rate	39	33	21		
Clinical Care					17
Uninsured	19%	20%	11%		
Primary care physicians	1,167:1	1,134:1	1,067:1		
Dentists	1,779:1	1,479:1	1,516:1		
Preventable hospital stays	63	43	47	No change ⁴	
Diabetic screening	87%	86%	90%	No change ⁵	
Mammography screening	70%	66%	73%	No change ⁶	
Social & Economic Factors					28
High school graduation	62%	68%			
Some college	55%	65%	70%		
Unemployment	11.4%	9.5%	5.0%	Better ⁷	
Children in poverty	29%	23%	14%	Worse ⁸	
Inadequate social support	19%	15%	14%		
Children in single-parent households	33%	30%	20%		
Violent crime rate	188	257	66		
Physical Environment					6
Daily fine particulate matter	9.1	9.1	8.8		
Drinking water safety	0%	3%	0%		
Access to recreational facilities	11	12	16		
Limited access to healthy foods	5%	5%	1%		
Fast food restaurants	36%	43%	27%		

¹ 3-year average, age-adjusted YPLL per 100,000, worsened from 2008 to 2009

² 3-year average, % obese, no change from 2008 to 2009

³ 3-year average, % physically inactive, worsened from 2008 to 2009

⁴ Preventable hospital stays per 100,000, no change from 2009 to 2010

⁵ % diabetic screened, no change from 2009 to 2010

⁶ % mammography screened, no change from 2009 to 2010

⁷ % unemployed, better from 2010 to 2011

⁸ % children living in poverty, worse from 2010-2011

HOUSING

In 2010, 88.7% of housing units were occupied. Sixty-six percent of Coos County residents were living in owner-occupied housing units, while 34.4% were renting housing units. In 2009, homes ranged in value from roughly \$121,594 to \$276,038, with the average value of homes being \$197,741, which was up from \$94,900 in 2000. The average price of a detached home in 2009 was \$238,359. Contract rent for apartments were on average, \$537 per month. The median monthly housing costs for homes and condos with a mortgage was \$1,343, while the median monthly housing cost for units without a mortgage was \$305 per month. The Coos-Curry Housing Authority provides housing assistance to low-income individuals and families.

Demographics

The population of Coos County has decreased slightly, according to the Census 2011 Population Estimate. Demographically, the county continues to be mostly white, with a slight increase in persons identifying as Hispanic (Table 6).

Table 6: Coos County Population Trends, 2009 – 2011

Demographics / Race / Ethnicity	Coos County	Oregon
Total Population ¹	62,791	3,871,859
Population < 18 years of age ²	19.1%	22.5%
Population 18 – 64 years of age ²	59.4%	63.5%
Population ≥ 65 years of age ²	21.8%	14.3%
Population ≥ 75 years of age ²	9.5%	6.4%
Population ≥ 85 years of age ²	2.6%	2.0%
Median Age, years old ²	47.4	38.5
White ¹	91.4%	88.6%
Hispanic or Latino ¹	5.6%	12.0%
Persons Reporting two or More Races ¹	4.1%	3.4%
Native American ¹	2.7%	1.8%
Asian ¹	1.1%	3.9%
Black or African American ¹	0.5%	2.0%
Hawaiian or Pacific Islander ¹	0.2%	0.4%

¹U.S. Census Bureau, 2011 Coos County, Oregon QuickFacts and Oregon QuickFacts. ²U.S. Census Bureau, 2009-2011 American Community Survey, Age and Sex.

Population distribution by age group has shown an increasing trend towards a disproportionate distribution of persons 65 years and older in Coos County when compared to Oregon and the U.S. (Figure 1). In addition, Coos County has fewer children and adolescents than both Oregon and the U.S.

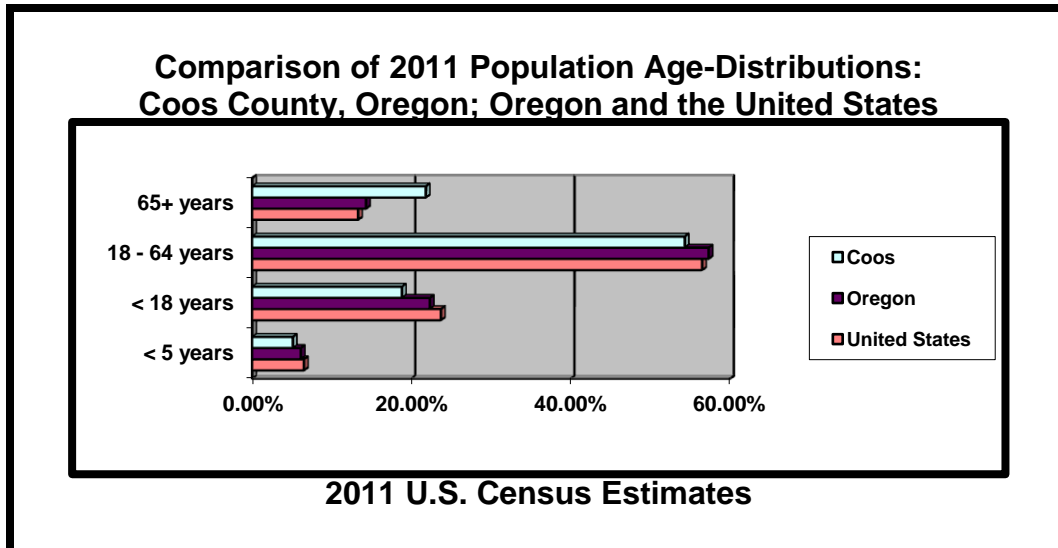


Figure 1: 2011 Population Estimates by Age Group for Coos County, Oregon and the U.S.

Births

The percent of births to unmarried mothers are an indication of the number of children at risk for the hardships of poverty and its implications for poorer health outcomes. Although the number of teen births has decreased in recent years, there was an increase in 2011 (Table 7).

Table 7: Birth by Age of Mother in Coos County and Oregon, 2011

Births – 2011	Number	Coos County	Oregon
Total Births	577	577	45,136
Births to Women ≥ 20 years old	522	90.5%	91.3%
Births to Women 18 to 19 years old	39	7.7%	6.2%
Births to Girls 10 to 17 years old	16	3.1%	2.6%
Births to Unmarried Mothers	263	45.6%	35.5%

Oregon Health Authority: Vital Statistics

Death

The leading cause of death in Coos County is cancer (Table 8).

Table 8: Leading Causes of Death in Coos County, 2011

Number of Deaths	Coos County's Leading Causes of Death – 2011
208	Cancer
188	Heart Disease
60	Chronic Lower Respiratory Diseases
52	Unintentional Injuries
37	Cerebrovascular Disease
31	Diabetes
25	Alzheimer's
18	Alcohol-Induced
17	High Blood Pressure
14	Suicide
9	Parkinson's

OHA Public Health Division. (2011). Annual Report.

Fetal Death

The fetal mortality rate for Coos County during the 3-year period 2007-2009 was 3.6 per 1,000 live births (Table 9). The Healthy People 2020 National Benchmark for fetal mortality is a rate of 6.0 per 1,000. In 2011, all reported fetal deaths in Coos County were reported in women 15-19 years of age.

Table 9: Fetal Mortality Data, 2007 – 2009 and 2011

Fetal Mortality	Coos County (Number)	Coos County (Rate per 1,000)	Oregon (Rate per 1,000)
Fetal Mortality (2011)	3	5.2	4.7
Fetal Mortality (2007 – 2009)	7	3.6	5.2

OHA Public Health Division. (2011). Annual Report.

Premature Death

Years-of-Life-Lost (YLL) is an estimate of the average years a person would have lived if he or she had not died prematurely. Deaths among younger persons contribute more to the YLL measure than deaths among older persons. YLL is used in public health planning to compare the relative importance of different causes of premature deaths within a given population, to set priorities for prevention, and to compare the premature mortality experience between populations.

5,326 years of life were lost in Coos County in 2011 alone. The primary cause of early death in Coos County was cancer, which was followed by unintended injury, heart disease, diabetes, chronic lower respiratory disease, alcohol use, and suicide (Table 10).

Table 10: Coos County YLL of Cause of Death, 2011

Causes of Death	YLL
Cancer	1,250
Unintended injury	759
Heart disease	690
Diabetes	288
Chronic lower respiratory disease	256
Alcohol-induced	237
Suicide	214

OHA Public Health Division. (2011). Annual Report.

Many factors play a role in a persons' life expectancy. Behavior, often influenced heavily by socioeconomics, is one such factor that largely affects both life expectancy and quality of life. Fortunately, behavior is something that can be molded or changed. Making healthier choices can improve quality of life, decrease healthcare costs, increase life expectancy, and improve socioeconomic status. Figure 2 shows that using tobacco, eating poorly, drinking too much alcohol and exercising infrequently all contribute to diseases that result in premature death.

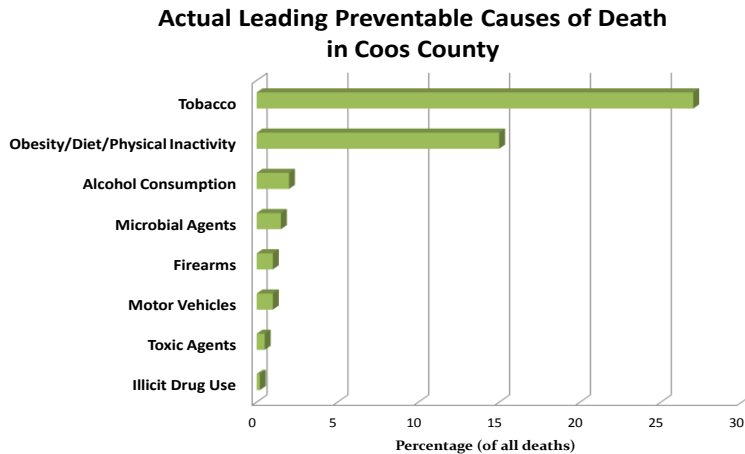


Figure 2: Leading Preventable Causes of Death in Coos County

CANCER

The leading cause of premature death before age 75 in Coos County is cancer (Table 11). In 2010, Coos County had the 3rd highest death rate for cancer in Oregon. Cancers of the lung, mouth, esophagus, and kidney are all linked to tobacco use. Other common risk factors for cancers include obesity and sexually transmitted diseases such as human papillomavirus (HPV).

Table 11: Cancer-related Deaths in Coos County and Oregon, 2010

Cancer: Death Rate (per 100,000)	Rank in Oregon	Coos County*	Oregon*	Benchmarks*
All Cancer	3 rd	210.5	185.8	160.6
Breast Cancer	20 th	19.4	21.5	20.6
Colon & Rectum Cancer	9 th	18.5	16.0	14.5
Esophagus Cancer	3 rd	7.7	4.8	--
Kidney & Renal Cancer	1 st	7.1	3.8	--
Lung & Bronchus Cancer	2 nd	67.2	51.1	45.5
Malignant Melanoma	2 nd	4.1	3.1	2.4
Oral & Pharyngeal Cancer	1 st	4.7	2.4	2.3
Prostate Cancer	23 rd	19.8	25.7	21.2

* Rate per 100,000
Oregon Health Authority: Cancer in Oregon, 2010.

UNINTENDED INJURY

Deaths due to unintentional injury can be prevented. In 2010, unintentional injuries were the second ranked cause of early or premature death in Coos County (Table 12). In the 5-year period of 2006-2010, Coos County had 49 motor vehicle accident fatalities. Just over a third of these fatalities involved alcohol.

Table 12: Deaths Due to Unintended in Injury in Coos County, 2011

Injury	Number of Deaths	Rate per 100,000	Benchmark (rate per 100,000)
Motor Vehicle	16	25.4	12.4
Falls	20	31.7	7.0
Poison, Drugs	6	9.5	
Poison, Other	1	1.6	
Fire	1	1.6	0.86
Drowning	0	0	1.1
Water Transport	1	1.6	

OHA Public Health Division. (2011). Annual Report.

In recent years the number of fall-related deaths has increased (Table 13). The older the population group, the higher the rate of deaths and hospitalizations due to falls.

Table 13: Deaths Due to Falls in Coos County and Oregon, 2011

Fall-related Deaths	Coos County				Oregon	
	Number		Rate per 100,000		Rate per 100,000	
Age Group:	Female	Male	Female	Male	Female	Male
55-64	0	0	0	0	4.3	7.7
65-74	0	1	0	9.1	7.7	18.9
75-84	10	3	145.6	49.2	76.3	85.1
85+	15	8	522.5	408.4	367.2	407.4
All Ages and Genders	38		190.3		--	

OHA Public Health Division, Injury & Violence Prevention Program, Injury in Oregon, 2011 Annual Data Report

Over a 3-year period, 38 deaths and 236 hospitalizations related to poisonings occurred in Coos County (Table 14). Nineteen of the 38 deaths were attributed to opioid use.

Table 14: Poison-related Deaths and Hospitalization in Coos County, 2009-2011

Poison-Related Deaths and Hospitalizations	Opioid-Related	Any Poison-Related	
	Deaths	Deaths	Hospitalizations
Unintentional	14	23	100
Suicide	3	15	136
Undetermined Intent	2	--	--
Total	19	38	236

"--" indicates this data was not available. Injury in Oregon, 2011 Annual Data Report, Appendix B – Injury Hospitalizations, County Injury Hospitalizations: County by intent by intent, manner, age group and sex 2009-2011

HEART DISEASE

In 2011, heart disease was the third leading cause of premature death in Coos County, with an estimated 477 YLL. The leading contributors to premature death continue to be linked to behaviors such as smoking, poor diet and lack of exercise. Coos County compares unfavorably with the state as a whole for conditions and diseases such as hypertension, high blood pressure, high cholesterol, and diabetes, which are all contributing factors for premature death. Other contributing factors include obesity and oral health.

DIABETES

Diabetes was the fourth leading cause of premature death in Coos County in 2011. Diabetes is a chronic, progressive disease that results in high costs for individuals and society due to complications, lost productivity, and the expense of hospitalizations (Oregon Department of Human Services, 2008). In addition, the health status of Oregonians varies drastically among those who are and are not diabetics. Of those who are diabetic, 52% report fair or poor health status, 32% report good health status, and 17% very good or excellent health status. Of those who are not diabetic, 12% report fair or poor health status, 28% report good health status, and 60% report very good or excellent health status (Oregon Public Health Division, BRFSS 2006). Approximately, 10.9% (age-adjusted) individuals are currently living with diabetes in Coos County (Oregon BRFSS County Combined Dataset, 2008-2011). It is essential to assist those who are pre-diabetic or at risk for developing diabetes so that they can live longer, healthier lives. Those who are at greatest risk for developing diabetes in Coos County are those who are overweight (31.3%), obese (30.0%), and report no leisure time activity (19.8%).

CHRONIC LOWER RESPIRATORY DISEASE

Chronic lower respiratory disease (CLRD) was the fifth leading cause of premature death in Coos County in 2011. There are several risk factors for CLRD, many of which can be prevented. Tobacco smoke, second-hand tobacco smoke, other indoor air pollutants, allergens and occupational agents are all major risk factors for CLRD. Other possible risk factors include diet and nutrition and past infectious chronic respiratory diseases. In Coos County, 14,254 adults regularly smoke cigarettes and 27% (226 people) of all deaths in Coos County can be attributed to tobacco use every year. Countywide, \$41 million dollars are spent on medical care for tobacco-related illnesses. In addition, there is an estimated \$38 million in lost productivity due to tobacco-related deaths.

ALCOHOL-INDUCED DEATH

In 2011, alcohol-induced death was the sixth leading cause of premature death. Alcohol consumption is a leading cause of chronic liver disease, and is toxic to many organ systems including the heart, stomach,

pancreas and nervous system. In addition, some research has shown a link between drinking alcohol and cancers of the mouth, pharynx, esophagus, colon, rectum, liver, larynx and breast. From 2007 to 2011, the rate of alcohol-induced disease (age-adjusted) in Coos County was 23 per 100,000. During the same period, the rate in Oregon per 100,000 was 14.

SUICIDE

In Coos County, suicide was the seventh ranked cause of early death (before age 75) and the 10th ranked cause of all deaths in 2011 (Table 15).

Table 15: Suicide-related Deaths in Coos County, Oregon and the U.S., 2003-2010

Suicides	Coos County	Oregon	United States	Benchmark
Number	149	4,772	--	
Rate per 100,000	29.4	16.1	11.3	10.2

Oregon Health Authority Public Health Division, Injury & Violence Prevention Program.

Most of the suicide deaths are in the older population, 45 to 64 years old (Table 16). Males committed suicide 2.5 times more frequently than females during this time period. The method used most often by males was firearms; for females, poisoning. Veterans accounted for 40 of the deaths, primarily in the ages 45 and older.

Table 16: Number of Suicides by Age Group in Coos County and Oregon, 2003-2010

Number of Suicides by Age Group	Coos County Deaths	Coos County Rate per 100,000	Oregon Rate per 100,000
≤ 17	2	*	--
18 - 24	15	37.9	14.7
25 - 44	31	29.2	18.4
45 - 64	63	39.6	23.7
≥ 65	38	36.9	23.2
All Ages	149	29.4	16.1

*Due to the small number of deaths, the rate is not calculated. "--" indicates this data was not available.

Oregon Health Authority Public Health Division, Injury & Violence Prevention Program

Of the 149 suicide deaths in Coos County from 2003 to 2010, 44.3% (N=66) were known to have underlying mental health or substance abuse issues (Table 17). Of these 66 deaths, 22.7% were 25 to 44 years of age and 47% were 45 to 64 years of age.

Table 17: Suicides Linked to Mental Health or Substance Problems in Coos County by Age Group, 2003-2010

Age Group	Mental Disorder	Alcohol Problem	Other Substance Problem
≤ 17	2	0	0
18 - 24	6	4	5
25 - 44	15	8	5
45 - 64	31	17	9
≥ 65	12	6	1
All Ages	66	35	20

Oregon Health Authority Public Health Division, Injury & Violence Prevention Program. Special report generated upon request.

Health Issues

Illness, Injury and Disability

Illness

CHRONIC DISEASES AND CONDITIONS

Chronic diseases and conditions such as heart disease, arthritis, asthma, stroke, cancer and diabetes, are the leading causes of death and disability in the U.S. These diseases account for 7 of every 10 deaths and affect the quality of life of 90 million Americans. As a result, an estimated 75% of our health care dollars goes to the treatment of chronic diseases and conditions.

Chronic disease and poverty are interconnected in a vicious cycle. Chronic diseases result in lost time at work and thus create and contribute to poverty. Persons living in poverty are more vulnerable to chronic disease, including greater exposure to various risk factors and decreased access to health services. In short, the chronic disease burden is concentrated among the poor, and is generational. The overwhelming majority of those who are diagnosed with chronic disease conditions are affected by mental and emotional illnesses; and these illnesses can create further barriers to care and health inequities.

Unfortunately, Coos County residents are more afflicted by chronic diseases and conditions than most other Oregonians (Tables 18 and 19).

Table 18: Selected chronic conditions by percent affected in Coos County and Oregon

Selected Chronic Conditions	Coos County	Oregon
Arthritis	28.4%	25.8%
Asthma	13.1%	9.7%
Heart Attack	7.3%	3.3%
Angina	7.7%	3.4%
Stroke	5.7%	2.3%
Diabetes	11.0%	6.8%
High Blood Pressure	28.5%	25.8%
High Cholesterol	41.8%	33.0%

Oregon Health Authority. Arthritis in Oregon Report, 2011.
 Oregon Health Authority. (2010). Heart Disease and Stroke in Oregon: Update.
 Oregon Health Authority. The Burden of Asthma in Oregon: 2010.
 Oregon Health Authority. The Burden of Diabetes in Oregon: 2008.

Of note, the prevalence of tobacco use among Coos County residents is evident by the high statewide rankings of the incidence of esophagus (2nd), lung and bronchus (3rd), and oral and pharyngeal (3rd) cancer (Table 18).

Table 19: Incident of cancer per 100,000 in Coos County and Oregon

Cancer Incidence Rate (per 100,000)	Rank in Oregon¹	Coos County¹	Oregon²
All Cancer	11th	479.6	462.3
Breast Cancer, Female	25 th	116.5	130.7
Colon & Rectum Cancer	21 st	41.0	42.7
Esophagus Cancer	2 nd	9.6	5.7
Kidney & Renal Cancer	6 th	18.1	14.6
Lung & Bronchus Cancer	3 rd	79.6	65.6
Malignant Melanoma	24 th	17.5	26.0
Oral & Pharyngeal Cancer	3 rd	15.1	10.5
Prostate Cancer	9 th	163.9	145.1

¹Oregon Cancer Registry, Incidence by County, 2006-2010. ²National Cancer Institute, 2005-2009.

OVERWEIGHT AND OBESE

Body weight and activity levels affect our level of wellness. Being overweight or physical inactive contributes to the development of diseases such as diabetes, heart disease, and arthritis. Our rates of obesity were similar to the rest of the state (Tables 20 and 21). The causes of obesity are complex; and include nutritional choices, food insecurity, and exercise patterns.

Table 20: Percent of Overweight and Obese Adults in Coos County and Oregon, 2006-2009

Body Weight - Adults	Coos County	Oregon	Benchmark
Overweight (age-adjusted)	36.8%	36.1%	n/a
Obese (age-adjusted)	27.3%	24.5%	30.5%

Oregon Overweight, Obesity, Physical Activity and Nutrition Facts (2012)

Childhood obesity is a serious medical condition that affects children and adolescents. It occurs when a child is well above the normal weight for his or her age and height. Childhood obesity is particularly troubling because the extra pounds often start children on the path to health problems that were once confined to adults, such as diabetes, high blood pressure and high cholesterol. One of the best strategies to reduce childhood obesity is to improve the diet and exercise habits of the entire family.

The percent of children and adolescents who are overweight or obese in Coos County is similar to the trend across the state, and relatively low when compared to national levels. The national benchmarks for children and adolescents who are considered obese are 15.7% for children 6 to 11 years of age and 16.1% for adolescents 12 to 19 years of age. Although the percent of overweight and obese children and adolescents in Coos County is relatively low, opportunities for improvement in this area should continue to be pursued.

Table 21: Percent of Overweight and Obese Children, 8th to 11th grade in Coos County, 2007-2009

Body Weight – 8th & 11th Graders	Coos		Oregon	
	8th grade	11th grade	8th grade	11th grade
Overweight	15.7%	17.4%	15.2%	14.2%
Obese	10.8%	10.9%	10.7%	11.3%

Oregon Overweight, Obesity, Physical Activity and Nutrition Facts (2012)

COMMUNICABLE DISEASES

Oregon law specifies diseases of public health importance that must be reported to local public health authorities. Coos County disease investigation specialists investigate reports of communicable disease to characterize the illness and collect demographic information about the case, to identify possible sources of infection, and to take steps to prevent further transmission. In 2011, Coos County Public Health investigated 269 cases of reportable disease. The most commonly reported diseases in 2011 are shown in Table 22.

Table 22: Number of selected communicable diseases reported in Coos County, 2011

Disease	Number
AIDS/HIV, Living	39
Campylobacteriosis	23
Chlamydia	179
<i>E. coli</i> O157 infection	4
Giardiasis	4
Gonorrhea	2
Salmonellosis	7
Tuberculosis	1

Sexually transmitted diseases (STD) primarily affect teens and young adults because of riskier sexual behavior. Chlamydia is the most common reported disease in Coos County, and is the major cause of tubal infertility, ectopic pregnancy, pelvic inflammatory disease and chronic pelvic pain (Table 23). Unfortunately, most women are not aware of their infection because they do not experience symptoms, but that does not mean that the bacteria are not damaging the reproductive organs. Along with safe sex practices, screening is a vital measure to control the spread of chlamydia.

Table 23: Chlamydia trends in Coos County and Oregon, 2008-2013

Chlamydia Rates per 100,000 by Age and Gender	Coos County	Oregon
15-19 years	1,579.7	1,647.5
20-24 years	1,949.9	2,026.9
Male	119.6	211.0
Female	414.3	483.7
Overall	284.4	356.1

Oregon chlamydia report: Chlamydia cases, proportional morbidity and incidence by county 2008 through quarter 1 2013

MENTAL HEALTH MORBIDITY

Individuals with serious mental health conditions die an average of 14 - 32 years earlier than the general population. Their life expectancy is 49 - 60 years of age compared to the national life expectancy of nearly 78 years.

The reason for the significant difference is not completely understood but factors include very high rates of obesity and smoking, harmful levels of alcohol consumption, excessive salt intake, poor diet, and the presence of co-occurring disorders such as heart disease and diabetes.

Social consequences of serious mental illness that can impact health include poverty and unemployment, inadequate housing, stigmatization and low self-esteem. Doctors may focus on a patient's mental illness to the detriment of their physical health, and communication problems can be an issue. Those with mental illness may also be less compliant with health screenings and treatment.

Youth Mental Health

Mental health among Coos County youth is of concern, in part because the prevalence of youth with mental health conditions, but also because of the lack of resources to appropriately care for the volume of youth in need (Table 24 and 25).

Table 24: Self-reported Depression, Psychological Distress, and Suicidal Ideation and Suicide Attempts in 8th and 11th graders in Coos County and Oregon

Depression and Psychological Distress – Teens	Coos County		Oregon	
	8th	11th	8th	11th
Youth who had a Depressive Episode within the last year. (SWS)	25.8%	23.6%	22.7%	27.9%
Youth that Exhibit Psychological Distress Based on Mental Health Inventory-5. (SWS)	12.0%	11.4%	8.4%	8.3%

OHT 2007-2008, SWS Coos 2012

In 2010, 10 adolescents, 4 male and 6 female, attempted suicide in Coos County. One was 12 years of age or younger, one was 13-14 years of age and the remaining 8 were between the ages of 16 and 17 years (Oregon Adolescent Suicide Attempt Data System, 2010).

Table 25: Self-reported Suicidal Ideation and Suicide Attempts in Coos County and Oregon

Suicidal Ideation and Suicide Attempts – Teens	Coos County		Oregon	
	8th grade	11th grade	8th grade	11th grade
8 th and 11 th Graders self-reporting seriously considering attempting suicide in the past 12 months	17.7%	11.3%	15.8%	15.1%
8 th and 11 th Graders self-reporting seriously considering attempting suicide in the past 12 months	15.7%	15.8%	15.6%	12.9%
8 th and 11 th Graders self-reporting actually attempting suicide in the past 12 months	11.1%	1.4%	8.0%	6.0%
8 th and 11 th Graders self-reporting actually attempting suicide in the past 12 months	7.2 %	6.6 %	7.9 %	6.0%

Oregon Health Teen Survey, 2011.

Youth Residential Psychiatric Care

Coos County has a very high use of residential-based psychiatric treatment for children. Coos County averages approximately 6.5 children in residential care on a daily basis, a figure that is three times that of the State average, according to Oregon’s Addiction and Mental Health Division’s Client Process Monitoring System (CPMS) data.

There are no psychiatric residential facilities within the county or region. This means children and their families must travel to Eugene and Portland to access care. This often results in inadequate use of family therapy, parent training and other evidenced-based modalities. Children - especially those without families - can end up languishing in these facilities for a year or longer, resulting in even further long-term psychiatric distress.

Adult Mental Health

Many mental illnesses can be treated and recovery is possible. In fact, a wide array of effective mental health services and treatments are available to allow adults to be vital contributors to their communities. Yet, too many people remain unserved, and the consequences can be shattering. Some people end up addicted to drugs or alcohol, on the streets and homeless, or in jail or prison.

Mental health disorders also have a serious impact on physical health and are associated with the prevalence, progression, and outcome of some of today’s most pressing chronic diseases, including diabetes, heart disease and cancer. Mental health disorders can have harmful and long-lasting effects, including high psychosocial and economic costs. Tables 26 and 27 briefly describe the adult mental health status of Coos County residents.

Table 26: Depression and Psychological in Distressed Adults in Coos County and Oregon

Depression & Psychological in Distress Adults	Coos County	Oregon
Adults who had a major depressive episode in the past year, 2004-2006	8%	9%
Adults who had a major depressive episode in the past year, 2008-2010	7%	7%
Adults, 18 or older, with serious psychological distress in the last year, 2002-2004	9%	10%
Adults, 18 or older, with serious psychological distress in the last year, 2004-2006	11%	14%

Source Unknown

Pre- and postpartum women in Coos County are less likely to experience depression during or after pregnancy than women throughout Oregon (Table 26).

Table 27: Percent of Pre- and Postpartum Depression among Coos County and Oregon Residents

Pre-and Postpartum Depression	Coos County	Oregon
New mothers reporting depression during or after pregnancy	17.8%	23.7%

Pregnancy Risk Assessment Monitoring System (PRAMS) 2004-2008

Injury

FALL-RELATED HOSPITALIZATIONS

From 2009 to 2011, 698 falls resulting in hospitalization were reported in Coos County. Of these, 66% of fall deaths and 57% of fall-related hospitalizations in Coos County were suffered by females, 55 years of age and older. Coos County women are hospitalized for falls at a significantly higher rate than the State average (Table 28).

Table 28: Fall-related Hospitalizations in Coos County and Oregon, 2009-2011

Hospitalizations for Falls	Coos County				Oregon	
	Number		Rate per 100,000		Rate per 100,000	
	F	M	F	M	F	M
55-64	58	29	357.8	191.5	229.1	175.0
65-74	77	33	660.8	299.8	500.3	328.2
75-84	126	59	1835	966.9	1515	880.1
85+	139	47	4842	2399	3794	2476

OHA Public Health Division. (2011). Retrieved from: <https://public.health.oregon.gov/DiseasesConditions/InjuryFatalityData/Documents/Injury%20Report%20Appendix%20D.html>.

ABUSE

Violence is a public health issue as perilous as any microbial disease. The reduction of violence is targeted as one of the major goals of the U.S. national health plan in Healthy People 2020. Domestic violence alone affects a significant proportion of Coos County either as direct victims or as witnesses of abuse directed toward spouses or intimate partners, children, and elders. In addition to immediate physical, emotional and/or psychological injury, the sequelae of such abuse is often serious and life-long. Long-term effects may include permanent disabilities resulting from physical damage, sexually transmitted diseases including HIV, and complications of pregnancy and birth including low birth weight babies. Mental health effects such as depression, anxiety, post-traumatic stress disorder, alcohol and drug abuse, and suicide also have been documented as sequelae to domestic violence.

Abuse of Adults – Substantiated Claims

Adults with disabilities and elders are more at risk for abuse than adults who do not fall into these two categories. In 2011, there were 110 substantiated cases of adult abuse or neglect reported in Coos County (Table 29).

Table 29: Number of Substantiated Claims of Abuse or Neglect of Adults in Coos County, 2011

Category	Number
Mental / emotional	6
Neglect	38
Physical	9
Financial	30
Sexual	1
Self neglect	7
Verbal	19
Total	110

Aging and People with Disabilities Program. Division 7 Manager, March 2013

Child Abuse and Neglect

Coos County has had a higher rate of child abuse than the state as a whole for over a decade (Table 30). The main type of abuse is in the threat of harm and neglect. Children under the age of 5 years old are the ones most affected.

Table 30: Reported Child Abuse Data for Coos County and Oregon, 2011

Child Abuse	Coos County	Oregon
Victim Count	292	11,599
Victim Rate per 1,000 (5th highest in the State, 2011)	24.3	13.4
Incidents of Abuse / Neglect	376	14,284
# of Incidents of Mental Injury	0	184
# of Incidents of Neglect	154	4,929
# of Incidents of Physical Abuse	18	977
# of Incidents of Sexual Abuse	14	906
# of Incidents of Threat of Harm	190	7,288
Number in Foster Care	255	8,882
Foster Care Rate per 1,000	21.2	10.3

Source Unknown

SUICIDE-RELATED HOSPITALIZATIONS

The economic and human cost of suicidal behavior to individuals, families, communities and society makes suicide a serious health problem. In the U.S., suicide is one of the leading causes of death among young people. From 2009 to 2011, there were 142 suicide-related hospitalizations in Coos County. The average suicide costs approximately \$1,061,170 (CDC cost estimates based on 2005 data. Refers to people age 10 and over).

Disability

People with disabilities need health care and health programs for the same reasons anyone else does, to stay well, active, and a part of the community. Having a disability does not mean a person is not healthy or that he or she cannot be healthy. Being healthy means the same thing for all of us, getting and staying well so we can lead full, active lives. That means having the tools and information to make healthy choices and knowing how to prevent illness.

There are many types of disabilities, such as those that affect a person's hearing, vision, movement, thinking, remembering, learning, communicating, mental health and social relationships. To be healthy, people with disabilities require health care that meets their needs as a whole person, not just as a person with a disability. Most people with or without disabilities can stay healthy by learning about and living healthy lifestyles. When compared to Oregon rates, more than twice the percent of persons between 18 and 64 years of age live with disabilities in Coos County than in Oregon (Table 31). Of those living with disabilities in Coos County, 19% do not have health insurance.

Table 31: Disability and Health Insurance Coverage, 2010

	Coos County	Oregon
All Ages Percent Uninsured	18%	17%
18-64 with Disability	19%	7%
18-64 with Disability and Public Health Insurance*	56%	45%
18-64 with Disability and No Health Insurance	19%	22%

* Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or disabilities. U.S. Census. (2010).

Determinants of Health

The range of personal, social, economic, and environmental factors that influence health status are known as determinants of health. Determinants fall under several broad categories: policymaking, social factors, health services, individual behavior, and biology and genetics. It is the interrelationship among these factors that determine individual and population health. Determinants of health reach beyond the boundaries of traditional health care and public health sectors; sectors such as education, housing, transportation, agriculture, and environment can be important allies in improving population health.

Socioeconomic Factors

Employment

According to the U.S. Bureau of Labor Statistics, the estimated unemployment rate in Coos County as of February 2013 is 11.4% (N=3,239). Evidence shows that those who are unemployed have worse health than the employed population. The top five occupations in Coos County are identified in Figure 3.

Occupations

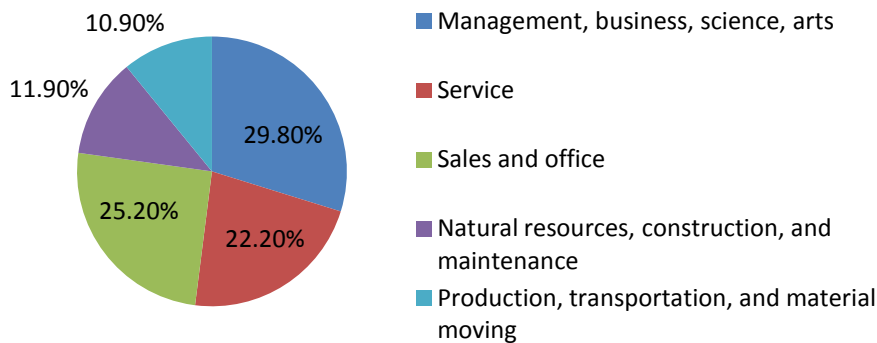


Figure 3: Top Five Occupations in Coos County, 2007-2011

The three top industries in Coos County are 1) educational services, and health care and social assistance; 2) retail trade; and 3) arts, entertainment, and recreation, and accommodation and food service.

Income/Poverty

Health is a crucially important economic asset, particularly for poor people. Poor people suffer worse health and die younger. They have higher than average child and maternal mortality, higher levels of disease, and more limited access to healthcare and social protection. Their livelihoods depend on their health. When poor people become ill or injured, their entire household can become trapped in a downward spiral of lost income and high healthcare costs.

In Coos County, multigenerational poverty has produced a culture of poverty. Poverty is linked with less access to health care, lower educational levels, and higher rates of behaviors adverse to health. A major factor causing the health disparities in Coos County is poverty, as shown by Coos County's median household income and percent of children below the poverty level (Table 32).

Table 32: Household Income and Poverty Data for Coos County and Oregon, 2009-2011

Income Data	Coos County	Oregon
Median Household Income	\$37,258	\$48,377
All People Below Poverty Level	17.6%	15.8%
People below 200% of FPL	40.0%	36.1%
Below Poverty Level < 18 years of age	22.9%	21.3%
Below Poverty Level ≥ 65 years of age	7.9%	7.9%
Unemployed (3-year estimate)	13.5%	12.2%

U.S. Census - American Community Survey 2009-2011

Education

Poverty can limit access to higher education. Higher levels of education often result in higher incomes, and access to health care is often linked to jobs requiring a certain level of educational attainment. Education also has an impact on health behaviors and lifestyle choices, and gives an individual a greater sense of personal control or self-efficacy. Adults with less than average health literacy are more likely to report their health status as poor. The education of parents affects their children’s health, not only through resources available to their children, but through their family’s lifestyle. In general, the education attained by Coos County residents is lower than Oregon, overall (Table 33).

Table 33: Education Attainment in Coos County and Oregon, 2007-2011

Education	Coos County	Oregon
High School Graduate or Higher	87.4%	88.9%
Some College, no degree	29.8%	25.2%
Associate’s Degree	8.1%	8.1%
Bachelor’s Degree	12.7%	18.4%
Graduate or professional degree	5.9%	10.6%

U.S. Census – American Community Survey 2007-2011

Housing

Housing is a significant expense, especially for persons who are either unemployed, have low wage jobs or only part-time work. Access to safe, stable, affordable housing or the lack thereof, has a huge impact on the ability to live and develop in a healthy manner.

The combined North Bend City/Coos-Curry Housing Authorities (CCNBCHAS) provide low-income rental assistance via the Section 8 Housing Choice Voucher Program and Project-based Housing Properties Program, and standard Public Housing programs. All of the programs have waiting lists, with waits ranging from 6 to 12 months or longer for Section 8 vouchers and Public Housing units, to 3 to 4 years or longer for some senior housing units. Eligibility and priority are determined by factors such as income, age, disability, having young children and military status. In April of 2013, 2,317 separate active pre-applications were on the combined waiting lists for CCNBCHAS. Approximately, 850 households within the boundary of Coos County, 225 households within the boundary of Curry County, and 115 households from elsewhere in the nation made up the 2,317 pre-applications.

In North Bend, Hamilton Court Apartments have 50 one-bedroom apartments for those 62 years of age or older, and some are designed for handicapped accessibility. The Housing Authority pays for the electricity, water, sewer and garbage service for this property. There is a laundry room and an activity center on site. All residents are exempt from community service. Airport Heights is another multi-housing unit located in North Bend. It has 58 duplex units, some designed for handicapped accessibility, such as wheelchair accessible, hearing impaired, or vision impaired. There are 2, 3 and 4-bedroom units. The Housing Authority pays for the garbage service for this property. All units have washer and dryer hook-ups and a storage area. There is playground equipment, a resource center with activities for residents,

and a computer lab. Community service (volunteer work) may be required. Myrtle Point also has low-income multi-housing units. The 6 duplex units are all 2-bedroom units and are scattered in Myrtle Point. The Housing Authority pays for garbage service for these properties. All units have washer/dryer hook-ups and a storage shed. Community service (volunteer work) may be required. Coquille has 22 duplex units that are 2 and 3-bedroom units located throughout the town. The Housing Authority pays for garbage service for these properties. All units have washer/dryer hook-ups and a storage shed. Community service (volunteer work) may be required. Woodland Apartments in Coos Bay has 72 apartments including; 1, 2, 3 and 4-bedroom units for families, seniors and disabled households. The Housing Authority pays the water, sewer and garbage service for this property. Laundry services are located on the property for residents' use. The Powers Housing Development includes an apartment with 26 2-bedroom and 1-bedroom units. This property is designated for elderly and/or disabled households. The Housing Authority pays the water, sewer and garbage service for this property. Transportation to Myrtle Point, Coquille, Coos Bay and North Bend is provided once a week by the CCAT bus. There are two laundry rooms on the property for residents' use. There is also a Resident Service Coordinator on site 40 hours per week to assist residents with needed services.

Bandon has 4 subsidized housing units; Harvard Street Apartments, Pine Village Apartments, Pacific Pines Apartments, and Seacrest Apartments. Harvard Street Apartments has 66 units, both family and single units, and accepts people of all ages. They currently have a couple of vacancies and no wait list. Pine Village Apartments has 32 one-bedroom units, which primarily house seniors and persons with disabilities. All units are currently occupied, and the average wait time for a unit is 3 months. Pacific Pines Apartments has 30 units and a wait list of 16 people. Units are for persons with a disability and 62 years of age and older. They have three 2-bedroom units, which are retained for two people or a person with medical necessity for two bedrooms.

With limited affordable housing and access to low-income housing, some individuals and families become homeless. In January 2012, 81 households, which consisted of 112 adults and 28 children under the age of 18 years, were homeless (Oregon State One Night Homeless Count Report, 2012).

Housing assistance in the form of weatherization assistance is also available through Oregon Coast Community Action. Priority for this program is given to households with residents over age 60 or under age 6, those with disabilities, and households without a heat source or who have abnormally high electric bills. Between 25 and 50 weatherization projects are completed each year. As of March 2013, there were 380 households on the waiting list.

Transportation

Transit dependency is usually defined as being unable to afford reliable transportation, not having a driver's license or being unable to drive a car. The transit-dependent population is primarily composed of four demographic groups; older adults, people with disabilities, low-income individuals and families, and adolescents. Low-income, elderly and mobility-impaired residents make up a disproportionately large share of the county's population. Twenty-one percent of the county's population is over age 65. This special transportation needs population is expected to increase significantly over the next decade as the "baby boomers", the fastest growing segment of the population, age. Table 34 shows who the primary transit-dependent populations are at both the county and state level.

Table 34: County and State Residents Most Likely to Need Transportation Assistance

Demographic Profile	Coos County	Oregon
Total Population	63,043	3,831,074
Seniors (65+)	13,486 (21.4%)	533,533 (13.9%)
Low Income	10,087 (16.0%)	566,999 (14.8%)
People with Disabilities (Ages 18-64)	6,965 (19.0%)	272,653 (11.3%)
Youth (Under 18)	11,930 (18.9%)	866,453 (22.6%)

Coos County Transportation System Plan. (March, 2011). Retrieved from: <http://www.co.coos.or.us/Portals/0/Planning/cctsp03-28-11.pdf>

According to the Coos County Area Transit (CCAT) Plan, there is an inclusive variety of transportation services represented in Coos County; however, they are limited in scope and geographic coverage. Public transit is provided by Coos County Area Transit Service District. Taxi and limousine service is available primarily in Coos Bay/North Bend area. Region 7 of the Oregon Department of Human Services maintains a volunteer sedan transportation program for non-emergency medical transportation. In addition, Bay Area Hospital covers some transportation costs; paying nearly \$12,000 in yellow cab services in fiscal year 2012 for discharge, outpatient treatment and other services.

Access to Healthy Foods

Food Insecurity

Because of poverty, many families with children experience food insecurity. As a result, malnutrition is a serious issue in Coos County that leads to a multitude of thriving issues. Some of the issues include poor academic progress, poor job performance, and obesity. Much of the community is underfed or lacks proper nutrition in their meals. By recognizing that people eat, smoke, and drink what is affordable and available to them we can improve their opportunities to thrive. There is a need to change both policies and the environment so that they support the community in eating healthy foods and enjoying regular physical activity.

Women, Infants, and Children (WIC) is a public health nutrition program that is vital to the health of women, infants and children in Coos County. WIC services are available in North Bend, Bandon, Coquille, Coquille Indian Tribe Community Health Center, Lakeside and Powers. There are 14 WIC authorized stores, and 42 farmers at 4 Farmers' Markets and 7 farm stands that honor WIC vouchers. Clients receive the following WIC services during their visits:

- Individual assessment of growth
- Education and counseling on nutrition and physical activity
- Breastfeeding partnerships with birthing hospitals, support through peer counseling and education
- Nutritious foods purchased with WIC vouchers
- Immunization screening and referral
- Referral to other preventive health services

In 2012, 61% of pregnant women in Coos County were served by WIC. Over 1,200 families and 3,000 infants and children, less than 5 years of age, were provided nutrition and financial assistance.

In addition, Coos County residents utilize resources such as Supplemental Nutrition Assistance Program (SNAP) benefits (formerly referred to as food stamps) and free school meals at higher percentage rates than the state overall. In March of 2013, SNAP served 10,868 Coos County households (18,595 individuals); dispersing \$2,378,900 in SNAP (food stamp) benefits for the month. This was a 2.5% increase over the number of households served in March of 2012 (10,596). Nationally, more than 33% of those eligible for SNAP benefits are not enrolled. 70% of eligible seniors are not enrolled.

The level of poverty throughout Coos County is evident when looking at the number and percent of children enrolled in supplemental food programs in area schools (Table 35).

Table 35: Supplemental Food Programs Targeted to Children in Coos County and Oregon, 2010-2011

Food Insecurity/Hunger	Coos County	Oregon
Food Boxes Distributed	21,311	1,024,000
Food Stamps/SNAP Benefit in past 12 months	20.3%	17.1%
Eligible for Free or Reduced School Meals	54.5%	50.6%
Summer Food Program Eligible & Participate, 2011	28%	22%

Oregon Food Bank and the Oregon Food Bank Network, 2010 – 2011 Annual Statistics

Access to Safe Places to Live, Work and Play

Community Safety

Community safety affects our health. There is the obvious impact of violence on the victim, and stress affects those who are exposed to crime and violence. This may result in stress-related disorders such as hypertension, increase in smoking, substance abuse, sexual risk-taking behaviors, and risky driving practices. Exposure to chronic stress contributes to prevalence of certain illnesses, such as respiratory infections and asthma, and can have adverse effects on a child’s optimal brain development.

Violent Crime Rate

Witnessing and experiencing community violence causes long-term behavioral and emotional health problems in youth and has shown to result in higher rates of post-traumatic stress disorder, depressive symptoms, and perpetration of violence. Fear of crime has also shown to limit mobility and physical activity in neighborhoods as well as inhibit social interaction. Violent crime or fear of violence in a community has an impact on physical and mental health. In addition, violent crimes also impose large costs on communities through lower property values, higher insurance premiums, and reduced investment in high-crime areas.

From 2007 to 2009, violent crimes in Coos County were well below the state average, but nearly twice the desired rate (Table 36). For every 10,000 people in Coos County, 100 experienced a personal crime in 2010. A personal crime could include murder, rape, kidnapping, robbery, and assault. Coos County ranked 13th statewide for crimes against a person.

Table 36: Crime Data for Coos County and Oregon, 2007-2009

Community Safety - Violent Crime	Coos County	Oregon	Benchmark
Violent crime rate per 100,000 population (Defined as murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault.)	133	271	73

2012 County Health Rankings (Data for 2007-2009)

Social and Emotional Support

Poor health outcomes have been associated with socially isolated individuals. Adults and children in single- or lone-parent households are both at risk for adverse health outcomes such as mental health problems (e.g., substance abuse, depression and suicide) and unhealthy behaviors such as smoking and excessive alcohol use. Levels of social and emotional support are of concern in Coos County. Coos

County is worse off than Oregon as a whole and would need to make substantial changes to reach national benchmarks (Table 37).

Table 37: Emotional and Social Support in Coos County and Oregon

Measures of Isolation	Coos County	Oregon	Benchmark
% of adults reporting that they do not receive the social and emotional support they need	35%	30%	20%
% of children living in single-parent households	19%	16%	14%

County Health Rankings. (2013). Retrieved from: <http://www.countyhealthrankings.org/app/oregon/2013/coos/county/outcomes/overall/snapshot/by-rank>

Behavior

In 2013, Coos County ranked as one of the least healthy counties in Oregon according to the County Health Rankings project. Health behaviors are heavily weighted in the overall score. Unfortunately, Coos County residents often behave in such a manner that it puts their health and the health of others at risk. Some of these behaviors involve drug, alcohol and tobacco use, immunization status, diet, exercise, and sexual activity.

Immunization Uptake

Infectious diseases can lead to additional health complications, disability and death. Vaccines can protect people who are immunized and those with whom they come in contact, from many infectious diseases that were once common in the United States and around the world.

ADULTS

Apart from influenza vaccination, which is now recommended for all adults, other adult vaccines target different populations based on age, certain medical conditions, behavioral risk factors (e.g., injection drug use), occupation, travel, and other indications. Some of the other adult vaccinations that are commonly administered include pneumococcal, tetanus, hepatitis A, hepatitis B, herpes zoster and human papillomavirus (HPV). Adult immunization coverage remains low for most routinely recommended vaccines and well below *Healthy People 2020* benchmarks (Table 38).

Table 38: Adult Vaccination Rates

Adult Vaccination Rates, 2008	Coos County	Oregon	Benchmark
Adults ≥ 65 who had a flu shot within the past year	66.0%	70.5%	90.0%
Adults ≥ 65 ever had a pneumococcal shot	78.9%	71.7%	90.0%
Persons who work in a healthcare facility and got a flu shot/mist in the last 12 months		52.9%	90.0%
Persons with direct patient contact who got a flu shot/mist in the last 12 months		50.7%	
Hospital Healthcare Worker Vaccination Rates, 2011-2012	Overall Facility Rate	Employees	Non-Employees Credentialed
Bay Area Hospital	69%	70%	66%
Coquille Valley Hospital	49%	63%	0%
Southern Coos Hospital	69%	70%	67%

Oregon Immunization Surveillance and Evaluation. (2008).

Oregon Health Authority, Oregon Health Policy and Research. (2012, October). Healthcare Acquired Infection Reporting Program Healthcare Worker Influenza Vaccination Rates 2011-2012 Season.

CHILDREN

Children are vaccinated on a schedule that optimizes their safety, balancing the risk for adverse reactions to immunizations and risk for adverse outcomes due to a vaccine-preventable disease.

All children in Oregon must have certain immunizations, or have an appropriate medical or religious exemption, in order to attend public school or childcare facilities. In 2013, Coos County had 10,368 students. 29 children (0.2%) were medically exempt from the immunization requirement and 598 children (5.8%) had religious exemptions. Coos County Public Health issued 436 school exclusion letters, advising parents that their children were missing required immunizations. By February 20th, 2013, the school-exclusion deadline, only 29 students had to be excluded due to missing immunizations.

According to the Oregon Health Authority, approximately 70% of Coos County children ages 24 to 35 months of age have received the full-series of each of the recommended vaccines (i.e., 4:3:1:3:3:1:4(f)) (Table 39).

Table 39: Coos County Immunization Rates for Children 24-35 months of age, 2005-2011

	2009		2010		2011	
	%UTD	±	% UTD	±	% UTD	±
Two Year Olds Up-to-Date Rate						
4:3:1 (a)	76.9%	3.3%	79.7%	3.2%	77.3%	3.3%
4:3:1:3 (b)	67.1%	3.7%	78.2%	3.3%	76.8%	3.4%
4:3:1:3:3 (c)	66.1%	3.7%	78.1%	3.3%	73.4%	3.5%
4:3:1:3:3:1 (d)	64.7%	3.7%	77.1%	3.3%	72.9%	3.5%
4:3:1:3:3:1:4 (e)	59.3%	3.9%	74.9%	3.4%	70.0%	3.7%

Oregon Behavioral Risk Factor Surveillance System, Center for Health Statistics, DHS; ALERT Immunization Information System, Oregon Immunization Program, DHS

- (a) Immunization series includes 4 doses of DTaP, 3 doses of IPV, 1 dose of MMR vaccine
- (b) All doses in the 4:3:1 series and 3 doses of Hib (or the two dose Merck series) vaccine
- (c) All doses in the 4:3:1:3 series and 3 doses of HepB vaccine
- (d) All doses in the 4:3:1:3:3 series and 1 dose of Varicella vaccine
- (e) All doses in the 4:3:1:3:3:1 series and 4 doses of PCV

Tobacco Use

Tobacco-Related Economic Costs

According to the Oregon Tobacco Prevention and Evaluation Program, the 2009 economic cost of tobacco in Coos County was \$79 million: \$41.4 million in direct costs due to medical expenditures, and \$37.7 million in indirect costs due to lost productivity.

The Coquille Indian Tribe Community Health Center's medical clinic has been identifying patients who are tobacco users for the past 12 years as a means of engaging users in cessation activities, and assessing readiness to quit. During this time, tobacco use in this population has consistently ranged between 35% - 40%, significantly higher than the overall rate in Coos County, which is 27% (2010).

Tobacco Use in Adults and Youth

Tobacco use among adults in Coos County far exceeds the amount of use across the state (Table 40). Similarly startling is the percent of mothers who smoke while pregnant; almost twice the level of the rest of the state.

Table 40: Self-Reported Tobacco Use Among Adults in Coos County and Oregon

Tobacco Use – Adults	Coos County	Oregon
Adult Cigarette Smoking (age-adjusted).	28.1%	17.1%
Male Adult Smokeless Tobacco Use	15.4%	6.3%
Mothers who Smoke while Pregnant	23.4%	12.2%
Tobacco-linked Death Rates per 100,000 (age-adjusted)	238.9	178.4
% of total deaths that are tobacco-linked	25.0%	22.1%
Tobacco-linked Cancer Incidence per 100,000 (age-adjusted)	179.7	146.8
Tobacco-linked Cancer Death Rate (age-adjusted) per 100,000	113.8	89.2

BRFSS. (2010). Oregon Vital Statistics Annual Report Volume II; OHA TPEP - Oregon Tobacco Facts & Laws: January 2011.

Trends among youth in Coos County appear to be positive (Table 41). While any amount of tobacco use is detrimental to health, the fact that tobacco use rates among youth in Coos County are comparable to rates across the state is encouraging despite the high level of use among adults in Coos County.

Table 41: Self-Reported Tobacco Use Among Youth in Coos County and Oregon

Tobacco Use - 8th & 11th Graders	Coos County		Oregon	
	8th grade	11th grade	8th grade	11th grade
Smoked cigarettes in the past 30 days. 2012 SWS (2010)	8.5%	11.4%	5.6%	11.9%
Used other tobacco products in the past 30 days. 2012 SWS	3.3%	14.1%	3.7%	9.7%
Male youth smokeless tobacco use in the past 30 days. 2007-2008 OHT	4.8%	17.2%	5.1%	13.6%

State of Oregon. (2012). Student Wellness Survey. Oregon Health Authority. (2011). Oregon Health Teens Survey.

Alcohol and Drug Use

Binge drinking is defined as 5 or more drinks by a man on one occasion, or 4 drinks for a woman. Men in Coos County have a much higher rate of alcohol use than statewide. Of special concern is that one out of two 11th grade students and one out of three 8th grade students consumed alcohol in the last 30 days.

Alcohol and Drug Use in Adults and Youth

Table 42: Percent of Adults Who Have Reported Binge Drinking on One Occasion, 2006-2009

Alcohol Use – Adults	Coos County	Oregon
Adult Males who have had 5 or more drinks of alcohol on one occasion	31.7%	18.7%
Adult Females who have had 4 or more drinks of alcohol on one occasion	7.4%	10.8%

Oregon Health Authority. (2010). BRFSS 2006 – 2009.

Table 43: Self-Reported Alcohol and Drug Use Among 8th and 11th Graders in Coos County

Alcohol & Drug Use – 8 th & 11 th Graders	Coos County		Oregon	
	8 th grade	11 th grade	8 th grade	11 th grade
Reported having consumed beer, wine, or liquor in the previous 30 days	33.9%	51.4%	28.9%	46.1%
Consumed at least 1 drink of alcohol in the past 30 days	23.1%	33.3%	19.6%	35.9%
Reported having 5 or more drinks in a short period of time during the past 30 days	13.2%	29.8%	11.7%	25.4%
Reported having 5 or more drinks of alcohol in a row (within a couple of hours), in the past 30 days	10.9%	16.9%	8.1%	21.4%
Reported use of marijuana one or more times in past 30 days	8.9%	21.4%	9%	18.9%
Reported use of marijuana one or more times in past 30 days	8.4%	16.0%	8.7%	21.8%
Reported use of prescription drugs (without a doctor's orders) to get high in the past 30 days	3.9%	7.9%	3.8%	6.4%
Reported use of prescription drugs (without a doctor's orders) to get high in the past 30 days	2.4%	10.0%	4.5%	8.4%
Reported use of inhalants during the past 30 days	6.3%	2.2%	4.4%	2.1%
Reported use of inhalants during the past 30 days	3.6%	0.0%	5.6%	1.8%

State of Oregon. (2012). Student Wellness Survey. Oregon Health Authority. (2011). Oregon Health Teens Survey.

Sexual Activity Among Youth

Sexual activity, particularly among youth, can increase the risk of adverse health outcomes, such as teen pregnancy and transmission of infections. Teen pregnancy is associated with poor prenatal care and pre-term delivery, which increases the risk of low birth weight, child developmental delay, illness, and mortality. Pregnant teens are more likely than older women to receive late or no prenatal care.

The teen pregnancy rate among youth 15 to 17 years of age in Coos County is higher than the state rate, but much lower than the national benchmark (Table 44).

Table 44: Self-reported Sexual Health and Activity Among 8th and 11th Graders in Coos County and Oregon

Teen Pregnancy and Sexual Activity	Coos County	Oregon	Benchmark
Teen Pregnancy Rate, 2011, ages 15-17 y/o (N=23)	20.4/1,000	17.1/1,000	36.2/1,000
8th graders who reported they "had sexual intercourse"	19.2%	17.4%	
11th graders who reported they "had sexual intercourse"	55.7%	48.1%	
11th graders who reported having sexual intercourse with three or more individuals in their lifetime	23.4%	16.7%	
11th grade females who used a method to prevent pregnancy the last time they had intercourse	82.8%	83.4%	
11th grade males who used a method to prevent pregnancy the last time they had intercourse	89.0%	83.1%	

Oregon Health Authority. (2011). Oregon Health Teens Survey.

Nutrition

A poor diet can lead to energy imbalance (e.g., eating more calories than one expends through physical activity) and can increase one's risk for overweight and obesity. Individuals who eat fast food one or

more times per week are at increased risk for weight gain, overweight and obesity. In addition, drinking sugar-sweetened beverages also contributes to weight gain, overweight and obesity. Hunger and food insecurity (i.e., reduced food intake and disrupted eating patterns because a household lacks money and other resources for food) might increase the risk for lower dietary quality and under nutrition. Under nutrition can negatively affect overall health, cognitive development, and school performance.

From 2006 to 2009, an average of 29.4% (age-adjusted) of adults in Coos County reported consuming at least five servings of fruits and vegetables per day.

Table 45 describes the eating behaviors of youth in Coos County and Oregon. In general, Coos County youth have better eating habits than youth throughout the state.

Table 45: Modifiable Risk Factors Related to Nutrition Among 8th and 11th Graders in Coos County and Oregon

Modifiable Risk Factors	Coos County		Oregon	
	8th grade	11th grade	8th grade	11th grade
Drank at least 7 sodas per week.	18.1%	20.4%	19.7%	19.5%
Bought soda at school at least 1 day per week	9.0*	19.4%	12.8%	19.2%
Consumed at least 5 servings of fruits and vegetables per day	21.7%	16.6%	21.6%	17.5%
Had breakfast every day	46.1%	34.1%	43.3%	37.9%
Drank at least 3 glasses of milk per day	27.4%*	18.5%	21.5%	14.6%

Oregon Overweight, Obesity, Physical Activity and Nutrition Facts (2012)

* Statistically significant difference compared to Oregon

BREASTFEEDING

Breastfeeding provides the ideal nutrition for babies (compared to breast-milk substitute), promotes mother-child bonding, and is economical. According to womenshealth.gov, breastfeeding is normal and healthy for infants and moms. Breast milk has disease-fighting cells called antibodies that help protect infants from germs, illness, and even sudden infant death syndrome (SIDS). Breastfeeding is linked to a lower risk of various health problems for babies, including: ear infections, stomach viruses, respiratory infections, atopic dermatitis, asthma, obesity, type 1 and type 2 diabetes, childhood leukemia, and necrotizing enterocolitis, a gastrointestinal disease in preterm infants.

89.5% of Coos County WIC clients started out breastfeeding (exceeding the national Healthy People objective). This compares well to the rate of 91% statewide for Oregon WIC moms, and the national average of 76.9%.

Physical Activity

Physical activity has many health benefits. These benefits apply to people of all ages, races and genders. For example, physical activity helps you maintain a healthy weight and makes it easier to do daily tasks, such as climbing stairs and shopping. Physically active adults are at lower risk for depression and declines in cognitive function as they get older. Cognitive function includes thinking, learning, and judgment skills. Physically active children and teens may have fewer symptoms of depression than their peers. Physical activity also lowers your risk for many diseases, such as coronary heart disease (CHD), diabetes, and cancer.

Coos County adults tend to be more physically active than Oregonians, as a whole (Table 46).

Table 46: Self-reported Physical Activity Among Adults in Coos County and Oregon, 2007-2008

Exercise/Activity Levels in Coos County	Activity Measure	Coos County	Oregon
Adult Physical Activity	% of adults (≥ 18 years of age) who met CDC physical activity requirements (age-adjusted).	61.5%	55.8%

BRFSS 2009, OHT 2007-2008

Like Coos County adults, youth also tend to be more physically active than their Oregon counterparts (Table 47). In addition, more participated in PE daily, but unfortunately, other behaviors that negatively impact weight were fairly consistent between the county and state.

Table 47: Modifiable Risk Factors Relating to Physical Activity Among 8th and 11th Graders in Coos County and Oregon

Modifiable Risk Factors	Coos County		Oregon	
	8th grade	11th grade	8th grade	11th grade
Meet CDC physical activity recommendations	72.4%*	58.1%*	57.1%	49.2%
Participated in PE daily	88.3%*	37.4%*	53.4%	20.9%
Watched TV 3 or more hours daily	26.8%	19.8%	28.2%	22.1%
Played video games or used the Internet 3 or more hours daily	21.9%	16.5%	21.4%	18.5%
Watched TV, or played video games, or used the Internet for 3 or more hours daily	50.4%	38.2%*	52.3%	44.1%

Oregon Overweight, Obesity, Physical Activity and Nutrition Facts (2012)

* Statistically significant difference compared to Oregon

Environmental Factors

The physical environment includes all of the physical parts of where we live and work (e.g., home, buildings, streets, open spaces, and infrastructure). The built environment influences a person’s level of physical activity. For example, inaccessible or nonexistent sidewalks and bicycle or walking paths contribute to sedentary habits. These habits lead to poor health outcomes such as obesity, cardiovascular disease, diabetes, and some types of cancer.

The 2011 Coos County Transportation System Plan (CCTSP) outlines five goals: mobility, multimodal system, livability, safety and funding. Of these goals, livability has one of the greatest impacts on health. Under this goal, CCTSP hopes to provide a transportation system that enhances community livability and promotes economic development while minimizing environmental impacts. Their objectives include:

- Minimize congestion on major travel routes by maximizing efficiency of the existing system, providing a network of travel routes, and encouraging the use of alternative modes of travel
- Balance the need for accessibility to adjacent land uses with the need to provide capacity on major travel routes
- Protect natural features and historic sites, preserve agricultural and forest land, and avoid, minimize, or mitigate impacts associated with transportation projects
- Work to preserve existing neighborhoods when developing roadway capacity improvements
- Coordinate land use and transportation planning decisions to maximize the efficiency of public infrastructure investments
- Provide a process to educate and involve the public in the planning and funding for future transportation system improvements

According to the 2011 CCTSP, there is no extensive network of specifically designated bike routes serving Coos County other than the Oregon Coast Bike Route (OCBR). In rural areas, the shared roadway is the primary facility for bicycle (and pedestrian) travel. Table 48 summarizes recommended bicycle improvements on County roads that improve or augment the OCBR and approximate locations

are illustrated in Figure 4 (page 34). This project list also includes one sidewalk improvement within Coquille city limits.

Table 48. Bicycle and Pedestrian Improvements

Location	Description	Estimated Cost (2010 \$)
<i>High priority/ Short term (0-5 Years)</i>		
Seven Devils Road south of Cape Arago Highway and north of US 101	Create 'gateway' and/or innovative signage to inform motorists of shared roadway	\$50,000
North 8th Street and Airport Way through Lakeside	Add a southbound bike lane through Lakeside, with a rest stop at the County Park. The lane would be a 6-foot paved shoulder.	\$600,000
Coos Head area	Conduct a study and develop a cooperative multimodal management plan	\$250,000
<i>Medium priority/Mid term (5-10 Years)</i>		
West Central Drive in Coquille, from Ivy to OR 42	Add a sidewalk on the south side of the street to extend current improvements from the high school	\$300,000
Seven Devils Road/West Beaver Hill Road/Whiskey Run Road/Seven Devils Road	Widen roadway to 4- to 6-foot shoulders on both sides of approximately 15 miles of roadway (where feasible)	\$7,700,000
Riverside Drive from US 101 to Fillmore Avenue (1.3 miles)	Widen roadway to provide 4- to 5-foot shoulders on both sides of the road (where feasible)	\$825,000 - \$935,000
Beach Loop Road from Polaris Lane to US 101 (2.3 miles)	Widen roadway to provide bike lanes, OR provide multi-use trail along one side of the roadway	\$1,400,000 - \$1,700,000
Seven Devils Road from West Beaver Hill Road to US 101	Following planned paving, add signage for a shared-lane bike route along Seven Devils (as an alternative to the adjacent OCBR section)	\$15,000

Coos County Transportation System Plan. (2011). Retrieved from: <http://www.co.coos.or.us/Portals/0/Planning/cctsp03-28-11.pdf>

The built environment does provide for school playgrounds and some community parks. In addition, the Boys and Girls Club has a great facility with year-round activities of youth. However, the local bowling alley in Coquille recently closed as did the skating rink in North Bend, leaving fewer options for teens and young adults to recreate and exercise outside of school property. There are outdoor skate parks in Coos Bay, Bandon and Myrtle Point, and the City of Bandon has plans to improve their boardwalk and add a pump track.

The weather in Coos County is often rainy with winds in excess of 30 mph, which can deter people from exercising outdoors. Indoor walking facilities include the Pony Village Mall and one fitness facility, both of which are located in Coos Bay/North Bend. Indoor swimming pools are also limited to the Coos Bay/North Bend area.

Other environmental factors include access to healthy foods provided by local restaurants and eating out vendors. Because of the rural nature of our county and the distance between city locations, many residents do not have access to a wide variety of choices. In addition, because the communities rely heavily on tourism, many restaurants provide "celebratory" or "vacation" restaurant fare like fish fries, pizza and ice cream, rather than healthy entrées. During the lag in tourist season, several of the restaurants, must close for the season, giving residents even fewer options.

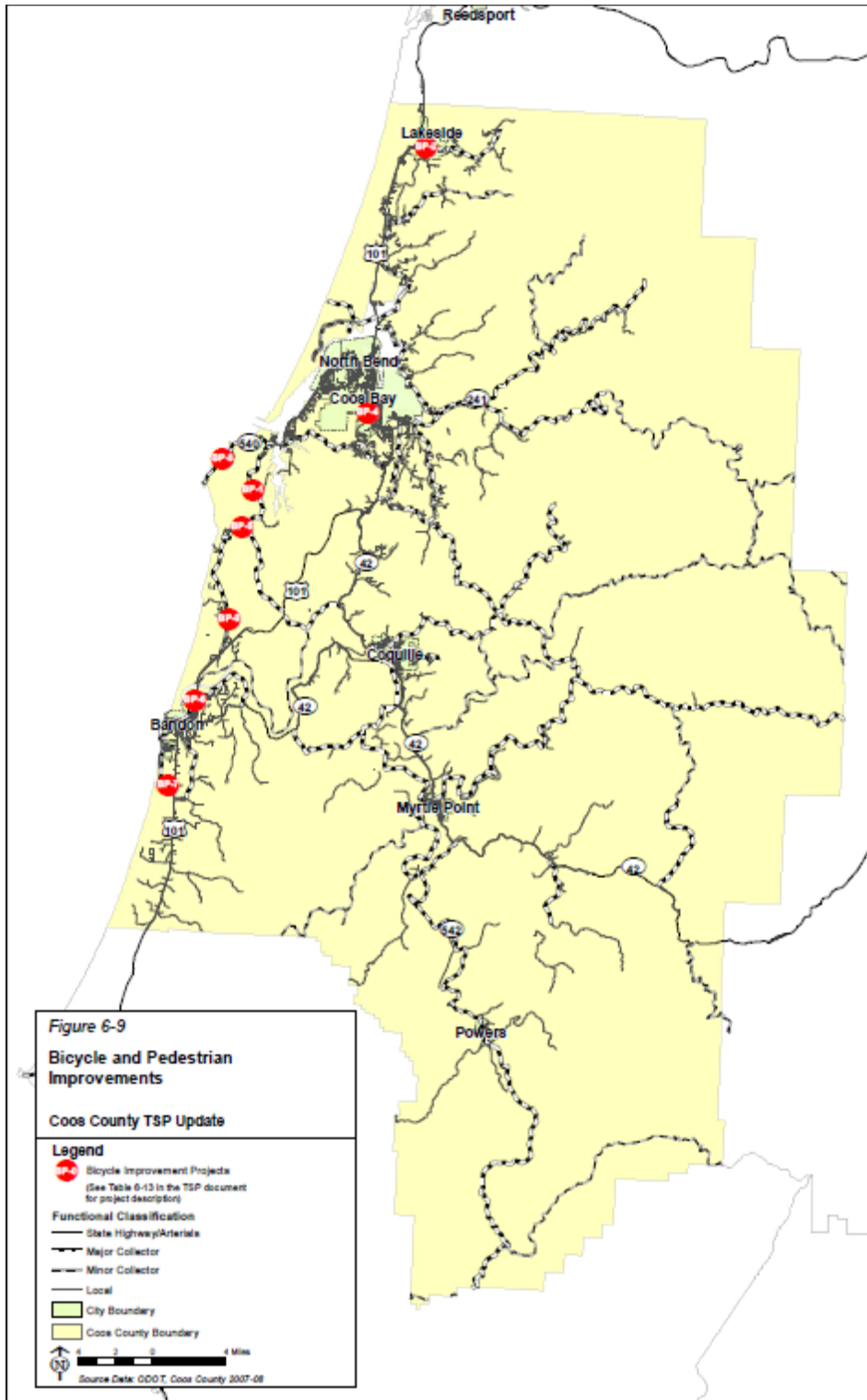


Figure 4. Approximate locations where improvement is scheduled to take place

The County Health Rankings have identified some specific built environment indicators of health. Table 49 summarizes the indicators that are measured as well as where the county rates in relation to Oregon as a whole and the national benchmarks.

Table 49: Environmental Factors Influencing Health

Physical and Built Environment	Environmental Factor	Coos County	Oregon	Benchmark
Daily Fine Particulate Matter	Average daily measure of fine particulate matter in micrograms per cubic meter (PM2.5) in a county	9.1	9.1	8.8
Drinking Water Safety	Percent of population exposed to water exceeding a violation limit in the past year	0%	3%	0%
Fast-Food Restaurant	Percent of all restaurants in the county that are fast-food establishments	36%	43%	27%
Access to Recreational Facilities	Rate of recreational facilities per 100,000 population.	11	12	16
Limited Access to Healthy Foods	Percent of population who are low-income and do not live close to a grocery store	5%	5%	1%
Limited Access to Healthy Foods – 2006	% population in poverty that also are far from a grocery store (10 miles rural/one mile urban).	1%	6%	0%
Air Pollution Particulate Matter Days – 2007	Annual number of unhealthy air quality days due to fine particulate matter.	14	12	0
Air pollution Ozone Days	Annual number of unhealthy air quality days due to ozone.	0	1	0

County Health Ranking. (2013). Retrieved from: <http://www.countyhealthrankings.org/app/oregon/2013/coos/county/outcomes/overall/snapshot/by-rank>

Commuting to Work

In Coos County, 74.7% of workers 16 years and over drove alone to work, 11.8% carpooled, 0.3% took public transportation (excluding taxicab), 5.3% walked and 5.8% worked at home. The average commute time to work was 19.1 minutes.

Because of the rural nature of the county, many residents may travel in excess of 30 minutes along dangerous roads to get to their jobs between Bandon and Coquille. Some health workers may travel from North Bend to Brookings, over 200 miles, in a single workday. There are limited roads connecting these communities, namely Highway 101 which follows the coast North/South and connects North Bend to Bandon and south in Curry County, and Highway 42S which connects Bandon to Coquille and continues on Highway 42 connecting Myrtle Point and Powers. These roads and 239 bridges are subject to wind and rain damage, landslides, flooding and sink holes with annual winter storms, and are often under construction during the short summer months. There are no alternative routes available if these roads or bridges are impassable or delayed.

Community Survey Results

In summer of 2013, Western Oregon Advanced Health conducted an anonymous survey of Oregon Health Plan (OHP) consumers residing in Coos County (Appendix A). The purpose of the survey was to learn how OHP services could better serve the health needs and goals of consumers. Four thousand eight hundred surveys were mailed, 725 were returned, and 656 were able to be included in the data analysis. Surveys that were inappropriately completed were excluded from the analysis to ensure quality of the results and findings.

Survey Participants:

Of those who participated in the survey, 69% self-identified as female, 29% as male, and 2% did not disclose their gender. 93% of participants were White, 3% were White/American Indian, 2% were American Indian, 1% was Asian and 1% was Hawaiian/Pacific Islander. Only 2% reported being Hispanic. The majority of participants (43%) were 51 to 64 years of age, 27% were between the ages of 31 and 50 years, 16% were over age 65 years, 13% were 18 to 30 years of age and just 1% were under 18 years old. 40% of survey participants had a high school diploma or GED, 32% had completed some college, but did not have a degree, 7% possessed an associate's degree and 5% a bachelor's degree or higher. 13% reported dropping out of school and 1% was still enrolled in high school. 53% of survey respondents were from the Bay Area (e.g., Coos Bay, Charleston), 20% were from Bandon, 14% were from Coquille, 9% were from Myrtle Point and 4% were from Lakeside. The majority of participants (51%) were enrolled in OHP at the time of the survey. 21% were enrolled in OHP and Medicare, 17% were enrolled in OHP and had a child enrolled as well, and the remainder of participants were either insured by another private or public carrier, on waiting lists or uninsured.

Survey Results:

Participants were asked about what kinds of things motivate them to try to be healthier. The top 5 responses were: 1) having enough energy to do the things I enjoy (n=404), 2) keeping my current health problems from getting worse (n=388), 3) being there for my friends/family in the future (n=305), 4) having less experience of pain (n=289), and 5) feeling good/better about myself (n=260). Participants were then asked if they are interested in making changes in any of these areas and if so, which areas. The top 5 responses were: 1) losing weight (n=348), 2) exercising more (n=304), 3) eating healthier (n=286), 4) cutting down on the amount of stress in my life (n=248), and 5) dealing with depression and/or loss in my life (n=180).

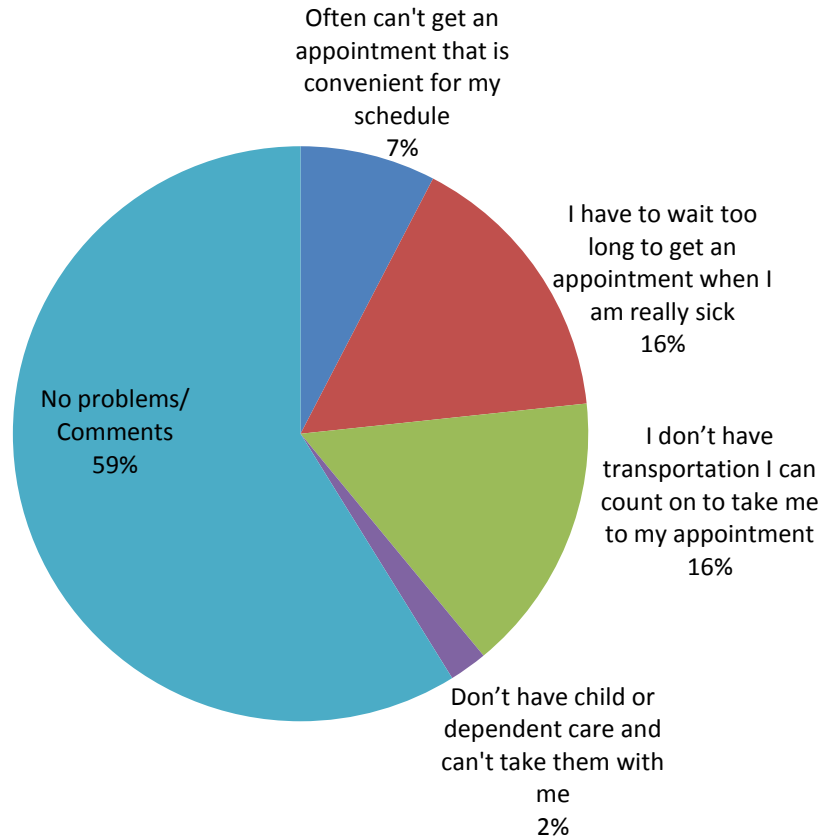
When participants were asked what kind of things might be most helpful in meeting their health goals, their responses varied, but three things rose to the top: 1) having a little more money (n=242), 2) nothing, just need to do it (n=142), and 3) having better transportation (n=110). Other common responses included help from a friend or family member, more regular contact with a health professional, and individual "coach" to work with me on my goal. In addition, participants were asked to select from a list of things that have been found to help some people meet their health goals that if available in their community, would be helpful to them. The top 5 selections were: 1) access to healthy food, such as Farmer's Markets (n=346), 2) parks and walking trails (n=198), 3) activities for adults and older people (n=179), 4) economy and job (n=170), and 5) medical clinics with adequate health services (n=165).

Participants were asked, if OHP were to provide incentives or rewards for achieving or maintaining your health goals, what would you find more attractive? The top five selections were:

1. Fuel/gas card
2. Cash
3. Grocery store credit
4. Health club membership
5. Don't want anything

Participants were asked if they have ever had problems getting in to see their health care provider. Results indicated that the majority, 59%, do not have problems getting in to see their provider.

Transportation and timely access appeared to be two barriers that kept consumers from getting in to see their health care provider.



The majority of survey participants (n=442; 67%) indicated that they have never gone to the emergency department for a problem that could have been treated at the doctor's office. Comments provided by the participants highlighted the need for timely access to primary care provider and access to after hours, non-emergency clinic.

Females and older populations over represent the targeted population in these survey results. This should be taken into consideration when interpreting the results and reading the conclusion.

Conclusions:

The results of this survey indicate that those who are enrolled in Oregon Health Plan have some very basic needs. Some of these needs can be met through collaborative community efforts by increasing access to nutritious foods and improving or expanding walkways and bikeways. Further attention to the built environment and concepts like Smart Growth and mixed-use development by city and county government officials, private industry, and community organizations can facilitate and promote healthy living, increase access to needed services and improve health outcomes.

WOAH can make a difference in the health of their consumers by: increasing timely access to providers; providing or ensuring after-hours, non-emergency health services; providing one-on-one case management; advocating for covered services that make a difference in health outcomes; and providing or supporting community efforts that increase activities for older adults (e.g., Fit and Fall Proof).

Existing Resources

Healthcare

Healthcare Capacity

The national benchmark ratio of primary care providers to population, as listed in the 2012 County Health Rankings, is 1:631. Coos County has 59 primary care physicians, a ratio of 1:1,069. The state ratio is 1:930. As a result of these shortages, Coos County is classified as a Medically Underserved Area/Population for low-income, a Primary Care Health Care Professional Shortage Area for low-income and homeless, a Mental Health Professional Shortage Area for all persons in Catchment Area 14, and a Dental Health Professional Shortage Area for low-income.

Provider shortages are felt throughout the county despite some of the data indicating otherwise. A few issues that influence this perception are: turnover of providers (e.g., those on J1 visa waivers and retiring), lack of specialists, and the demand placed on providers from areas outside the county such as Port Orford and Reedsport.

Capacity to provide medical care to the Coos County population affects everyone. Those living in Coquille, Myrtle Point and Powers are affected most by limited capacity. Based on research completed by Oregon Office of Rural Health, Powers has 0% capacity because there are no providers practicing in that area. Coquille and Myrtle Point have 45.7% capacity for primary care appointments, which is determined by the number of providers practicing in the community versus the number of persons in the community. The Oregon Office of Rural Health has determined that capacity levels above 80.5% indicate that healthcare access is not an issue for the community being accessed (Oregon Office of Rural Health, 2012). In 2012, data indicated that capacity in Bandon, Coos Bay and North Bend was sufficient for the number of persons residing in each community. However, the Oregon Office of Rural Health has also identified areas of unmet need in rural Oregon, which indicate that Bandon just meets the criteria for having health care needs met (Table 50). Total scores of 54 and less qualify as unmet areas of need. Primary care capacity was determined by the total visits provided divided by the total number of primary care visits needed. Ambulatory care sensitive (ACSC) ratio was calculated by taking the ACSC rate for service area (determined by taking the 3-year average of ACSC diagnoses divided by the current population of the service area and then multiplied by 1,000) divided by the ACSC rate of Oregon. Estimated travel time was calculated from the largest town/city in each of the rural service areas to the nearest town/city with a hospital, unless the city already had a hospital, in which case the driving time is defaulted to 10 minutes. Mortality ratio was calculated using three years worth of crude mortality data, and then averaged for one year in order to control for fluctuations that may occur annually with small numbers in some service areas (i.e., crude death rate = $\frac{\text{One Year Average Resident Deaths}}{\text{Current Population}} \times 1000$, mortality ratio = $\frac{\text{Crude Death Rate for Service Area}}{\text{Crude Death Rate for State}}$). Low birth weight (< 2500 grams or 5.5 pounds) was used, and data was averaged from the last five years (2007-2011).

Table 50: Areas of Unmet Health Care Need in Rural Oregon, Scores, 2013

Service Area	% Primary Care Visits Met	ACS Ratio to State	Minutes Travel Time to Hospital	Mortality Ratio to State	Low Birth Weight per 1000	Total Score
Bandon	103.4%	1.82	10	2.22	31.0	54
Coos Bay/ North Bend	150.8%	2.02	10	1.52	68.3	58
Coquille/ Myrtle Point	45.7%	1.95	10	1.52	78.1	48
Powers	0.0%	1.83	52	1.61	33.3	35

Oregon Office of Rural Health. (2013). Retrieved at <http://www.ohsu.edu/xd/outreach/oregon-rural-health/data/upload/2013-Areas-of-Unmet-Need-in-Rural-Oregon-Ratios.pdf>

Ambulatory care sensitive conditions (also known as preventable hospitalizations) are a set of inpatient diagnoses that may have been preventable or unnecessary had they been treated with timely and effective primary care. These include many common conditions such as asthma, diabetes, hypertension, and pneumonia. Many studies have shown that high rates of admissions for these conditions can be indicative of serious access or primary care performance problems. An Ambulatory Care Sensitive Conditions (ACSC) ratio less than "1.00" indicates that the area has a lower preventable hospitalization rate than the state as a whole; a value equal to "1.00" equals the state's rate; and a value greater than "1.00" indicates above average hospitalization for preventable conditions. The mean Ambulatory Care Sensitive Conditions Ratio for rural service areas is 1.25, which is the same as five of the last six years. The service areas with the largest ratios compared to the state are:

1. Warm Springs 4.15
2. Elgin 2.19
3. Reedsport 2.04
4. Coos Bay 2.02
5. Lakeview 1.98
6. Coquille/Myrtle Point 1.95
7. Wallowa/Enterprise 1.90
8. Gold Beach 1.86
9. Powers 1.83
10. Bandon 1.82

Insurance Coverage

In 2010, the Community Health Survey conducted by the U.S. Census Bureau estimated that 19.3% of Coos County residents (age-adjusted) were uninsured and 80.7% (age-adjusted) had some form of health coverage. According to the Oregon Health Authority, the estimated percent of adults and children without health insurance has increased since the 2010 Community Health Survey. The adult population, ages 18-64 years, is at greatest risk for being uninsured (Table 51).

Table 51: Public Health Insurance Eligible Adults and Children in Coos County and Oregon

Medical Care	Coos County	Oregon
OHP (Medicaid) Eligible	20.3%	16.1%
OHP (Medicaid) Eligible & Enrolled	87.8%	87.7%
Adults without Health Insurance 18-64 years old	23.9%	22.8%
Children without Health Insurance < 18 years old	11.1%	9.0%
Seniors without Health Insurance ≥ 65 years old	0.5%	0.7%

OHP Eligible/Enrolled information from the OHA/DHS DSSURS data warehouse

OREGON HEALTH PLAN (OHP)

Poverty limits access to healthcare for those who cannot afford to pay for a trip to the doctor and are without health insurance. Persons without resources may forgo preventive screening and delay treatment until health problems escalate to emergency status, which requires more expensive medical care.

Eligibility for OHP is based on income, with pregnant women and children receiving higher priority and benefits than adults. Persons who are enrolled in OHP are those with a lower income: less than 100% of the federal poverty level (FPL) for non-pregnant adults, less than 185% of the FPL for pregnant women, or less than 200% of the FPL for those 18 years-of-age and younger.

Compared to other OHP managed care plans in the state, the Coos County OHP consumers historically have had high rates of chronic disease. In 2011, OHP consumers in Coos County ranked in the top 3 for 20 of the 25 chronic disease conditions being closely monitored by the state because of their link to poor quality of life, premature death, and extraordinary healthcare costs (Table 52).

Table 52: Oregon Health Plan Members with Chronic Conditions

2011 Oregon Health Plan Members with Chronic Disease Conditions			
Rates per 1,000 Patients			
Diagnostic Category	Rate for Coos OHP Members	Rate for State's High-Risk Pool	Oregon Rate
Diabetes	75.75	111.91	48.92
Asthma	69.47	78.46	50.72
Chronic Bronchitis	44.25	64.08	20.87
Attention Deficit Disorder	39.25	39.39	25.89
Post-Traumatic Stress Disorder	34.89	29.38	23.01
Depression	21.09	26.88	18.51
Bipolar Illness	19.02	25.32	16.35
Chronic Ischemic Heart Disease	17.90	31.88	12.05
Hepatitis C	15.58	8.13	9.26
Chemical Dependency	15.32	14.69	20.86
Schizophrenia	15.15	35.95	15.36
Congestive Heart Failure	14.55	35.95	11.34
Borderline Personality Disorder	11.71	3.75	1.82
Dementia	8.26	34.39	8.84
Autism	7.83	17.19	6.82
Emphysema	6.46	10.94	2.75
Alzheimer's	2.15	13.13	2.72
Rate per 1,000 Overall on Plan	438.58	617.07	311.55

Western Oregon Advanced Health Quality Improvement Manager, March 2013

Many of the chronic conditions are associated with tobacco use. A survey of OHP consumers found that our adult tobacco use in Coos has been high, but is decreasing. 49% of adults on the Coos OHP health plan smoked in 2004, 42% in 2007, and 38% in 2011. Even with the reduction, this is significantly higher than the overall rate for adults in Coos of 28%, and of adults in Oregon of 17%.

Prenatal Care

It is critically important that babies get a good start in life. The mother's health status before and during her pregnancy, her nutrition, and use of any substances that could harm the baby will affect the baby, not only at birth, but into adulthood.

The mother's health status, the timing of her pregnancy, and her prenatal care all contribute to a healthy outcome. The rates for prenatal care, infant mortality and birth weight are all key indicators for the health of the next generation. Child nutrition, especially for the first 5 years of life, and rates of child abuse and neglect, are also indicators of child health and wellbeing. Coos County has seen an improvement in the percent of women receiving adequate prenatal care (Table 53).

Table 53: Prenatal Care in Coos County and Oregon

Prenatal Care	Number	Coos County	Oregon
Inadequate Prenatal Care	44	7.7%	5.4%
First Trimester Care	419	72.9%	75.1%

Oregon Health Authority: Vital Statistics

Safety Net Clinics

Persons who are low income and/or uninsured can obtain services at Safety Net Clinics. These clinics are community-based providers who offer health services to low-income people, including those without

insurance. Many safety net patients are OHP enrollees, the uninsured, and other vulnerable Oregonians who pay a sliding discounted fee for primary care services. Primary care services provided by the safety net include, but are not limited to:

- Urgent care
- Acute and chronic disease treatment
- Services based on local community need (mental health, dental and vision)
- Primary and preventive care
- Well child care
- Enabling services (e.g., translation/interpretation, case management, transportation and outreach)

There are four Safety Net Clinics in Coos County (Table 54).

Table 54: Safety Net Clinic in Coos County

Clinic	Description
Bandon Community Health Center	is a rural health clinic serving Bandon and Langlois; and is in the process of applying for FQHC designation
Coos County Public Health	provides state-mandated clinical services such as family planning, immunizations, and communicable disease case management; as well as breast and cervical cancer screening. Dental prevention (Ready to Smile) services are provided for school age children in Coos and Curry County schools.
Coquille Indian Tribe Community Health Center	provides primary medical care to Coquille Tribal members, their families, non-Coquille American Indians/Alaskan Natives, employees of the Coquille Indian Tribe and the general population of Coos County
Waterfall Community Health Center	a federally qualified health center located in North Bend
School-Based Health Centers (SBHC)	SBHCs operate on a school campus and provide medical services to students
Marshfield High School SBHC	is operated by Waterfall CHC, and also is open to the community
Powers SBHC	is operated by Waterfall CHC, and is located on the Powers Elementary School Campus

Tribal Health

The Coquille Indian Tribe (CIT) is one of the nine federally recognized Indian tribes in the state of Oregon. The CIT’s five-county primary service area is composed of Coos, Jackson, Douglas, Lane and Curry Counties. Residents of this five county Contract Health Service Delivery Area (CHSDA) are the primary target population of programs administered through the Coquille Indian Tribe Community Health Center (CITCHC). Approximately one-third of enrolled members live in Coos County, and two in ten enrolled members live in the remaining counties of the primary service area (Lane, Douglas, Curry, and Jackson).

The CITCHC provides primary medical care to Coquille Tribal members, their families, non-Coquille American Indians/Alaskan Natives, employees of the Coquille Indian Tribe and the general population of Coos County. Medical care is delivered by a board certified Family Practice M.D., Family Nurse Practitioner and Registered Nurse. Services include; wellness exams, well-child exams, sports physicals, acute-same day care, chronic disease management, a vaccine for children program, referrals for specialty care, Medical Nutrition Therapy, and Lab. In addition to medical care, the CITCHC operates a Contract Health Services (CHS) Program, which provides payment for medical, dental, mental health, substance abuse treatment and vision care, not available at the CITCHC. In addition, they provide a number of Community Health Programs that focus on the prevention of chronic diseases, obesity, and abuse of alcohol, tobacco and other drugs (ATOD) through education, case management, and the delivery of evidence-based, best practice community interventions.

The Coquille Indian Tribe Community Health Center also operates a Tribal Head Start Program for Coquille Tribal Children and non-Coquille American Indian and Alaska Native children in the community. The CIT Head Start has a number of interagency agreements in place to assure the availability of medical, dental, and mental health services to children and their families.

Nutrition and Health Education

Coos County OSU Extension Service provides nutrition education classes and resources to adults and children. The Nutrition Education Program (NEP) is funded through federal dollars and provides for education program assistants (1.5 FTE) to deliver nutrition education to low-income families. This includes education provided through our schools, food banks, Head Start and WIC programs. The Family and Community Health program area faculty, funded through both state and county dollars, is a Registered Dietitian (RD) who teaches nutrition for disease prevention and reversal to adults through community classes, worksite wellness programs and written resources (.45 FTE). The Extension 4-H program area has nutrition clubs and many other health-related projects for students to learn collaboration skills. Both Master Food Preserver and Master Gardener volunteer programs of the Extension Service provide community classes and resources in the farm to plate process, growing, preserving and preparing healthy foods.

Complete Health Improvement Program (CHIP) is a lifestyle improvement plan that takes participants through 18 educational sessions over 3 months. The program is led by certified instructors and includes pre and post lab work, educational videos, group support and delicious foods. CHIP is currently available in 2 locations (Coquille and Bandon) 2-3 times per year.

Alternative Care

There appears to be a broad and sufficient supply of alternative care practitioners in Coos County. These practitioners include chiropractors, acupuncturists, naturopaths, massage therapists, and personal trainers.

Access to End of Life Services

Coos County has sufficient end of life services to meet the current demand; however, recent clarification of coding for end-of-life services was handed down from the Centers for Medicare and Medicaid Services (CMS), which will likely impact what services will be available to patients with a terminal disease trajectory. Included in the clarifications is a directive to hospices that non-specific diagnoses such as debility or adult failure to thrive (AFTT) may no longer be listed as a principle terminal diagnosis on the hospice claim.

The impact of this clarification on hospice organizations has resulted in a discontinuation of the use of debility and AFTT as primary diagnoses, instead selecting a primary diagnosis that is most contributory to the patient's terminal disease trajectory and requires end of life palliative interventions. Unfortunately, the clarification of coding will likely have a negative impact to patients. Some patients will no longer be deemed eligible for hospice care. Most of these patients are elderly, frail, and slowly dying from a myriad of conditions that do not meet today's hospice standards. While CMS states that the Hospice Medicare Benefit was never intended to care for these patients, there is no other safety net for them if access to hospice is denied.

Hospitals

Hospitals provide patient treatment by specialized staff and equipment, and serve an important role in a community. Coos County is served by 3 hospitals; Bay Area Hospital (172 beds), Coquille Valley Hospital (16 beds), and Southern Coos Hospital (19 beds). Bay Area Hospital is a regional health district facility located in Coos Bay. Coquille Valley Hospital is located in Coquille and Southern Coos Hospital is located in Bandon. Both of these hospitals are type-B hospitals; small rural hospitals with 25 or fewer beds, 30 miles or less from another acute inpatient care facility. Coquille Valley Hospital and Southern Coos Hospital are Critical Access Hospitals. This means that they are paid based upon the cost of the care that is provided to a patient, rather than being paid a flat fee based upon the diagnostic-related group (DRG) and treatment of a patient.

SOUTHERN COOS HOSPITAL

Southern Coos Health District, which owns and operates Southern Coos Hospital and Health Center, is a public special district under Oregon law with a service area of 7,400. Located on the southern Oregon coast in Bandon, the district boundaries stretch roughly from Lampa Mountain about 6 miles to the east, the Coos County line about 7 miles south and the Medo Hill area about 6 miles to the north. It includes Bandon Dunes Golf Resort, the area's largest employer, and the City of Bandon, an incorporated area of 3,000 residents. The district is about 25 miles south of Bay Area Hospital.

A five-member board whom are elected by registered voters within the health district boundaries governs the district. Southern Coos Hospital primarily serves the areas surrounding Bandon, and draws clients from the communities of Langlois and Port Orford in Curry County.

The hospital includes a four-station emergency department staffed with physicians 24/7, in-patient care, surgical services, endoscopic services, an outpatient department, and a Swing-bed program. These services are supported by a full-service laboratory; a respiratory therapy department; medical imaging services including CT, ultrasound, general radiography, and a certified digital mammography program. Rehabilitation services are contracted. Together these services provide a comprehensive range of diagnostic and therapeutic programs.

BAY AREA HOSPITAL

Bay Area Hospital (BAH) is the largest hospital on the Oregon Coast. It has more than 1,000 employees, 130 physicians on its medical staff, 100 volunteers, and is governed by a five-member Board of Directors who are elected officials. As the Medical Center for Oregon's South Coast, Bay Area Hospital offers a comprehensive range of diagnostic and therapeutic services. The hospital's inpatient and outpatient services include medical, surgical, behavioral health, pediatric, critical care, home health, outpatient psychiatric, oncology, obstetrical, and other specialties. New and expanded medical services include laser treatments, MRI, CT, PET, mammography, stereotactic breast biopsy, laparoscopy, ultrasound, nuclear medicine, varicose vein treatment, and the latest technology in radiation therapy called IMRT (intensity modulated radiation therapy).

Table 55 shows the top 5 categories for patient admissions and their associated costs of care, for all patients and for the subcategory of patients receiving services through Western Oregon Advanced Health (WOAH) a Coordinated Care Organization under the Oregon Health Plan (OHP). The categories are broken down by diagnostic-related groups (DRGs).

Table 55: Bay Area Hospital's Top 5 Hospitalization Categories, 2011-2012

BAH's Top 5 Hospitalization Categories: By Diagnostic-Related Groups and Number of Cases - Fiscal year 2012 (July 2011 – June 2012)					
Medicare Severity DRG Description	WOAH/ OHP: Number of Cases	All Carriers: Number of Cases	Total WOAH/OHP Charges	Total Paid by WOAH/OHP	WOAH/OPH Percentage of the Total Cases within a DRG
795 - Normal Newborn	294	Not in the top 5	\$887,262 \$3018/ birth	\$381,523 \$1298/ birth	44%
775 - Vaginal Delivery without complicating diagnoses	231	384	\$1,863,525 \$8067/patient	\$801,306 \$3469/patient	60%
885 - Psychoses	84	231	\$1,529,994 \$18,214/admit	\$657,897 \$7832/admit	36%
766 - Cesarean section without complication	81	145	\$1,394,717 \$17,219/patient	\$599,728 \$7404/patient	56%
794 - Neonate with other significant problems	65	Not in top 5	\$347,704 \$5349/patient	\$149,513 \$2300/patient	9.8%
Total	755		\$6,023,202	\$2,589,977	

Data provided by BAH Interim Performance Improvement/Safety Officer in April, 2013.

In fiscal year 2012, BAH discharged 6,015 patients, excluding newborns (Table 56). Of these discharges, 1,552 (25.8%) were WOAHOHP clients, and 6.3% (N=98) were readmitted within 30 days. Readmissions included newborns and psychiatry patients.

Table 56: Bay Area Hospital Discharge and Readmission Statistics, FY 2012

BAH Discharge and Readmission Statistics - Fiscal Year 2012	WOAH/OHP: Number/Percent of Cases	All Carriers: Number/Percent of Cases	WOAH Percent of Total
Discharges	1,552	6,015	25.8%
Readmits	98	532	18.4%
Readmission Percentage	6.3%	8.8%	

Data provided by BAH Interim Performance Improvement/Safety Officer in April, 2013.

The top six OHP readmission categories were: psychosis, gastrointestinal problems, chronic obstructive pulmonary disease, pregnancy/newborn, pneumonia, and liver problems.

BAH Emergency Department Visits That Were Not Emergent in Nature, FY 2012

According to Oregon administrative rules, emergency medical services are warranted when acute symptoms of sufficient severity are such that a prudent layperson, who possesses an average knowledge of health and medicine, would think that not seeking immediate medical attention would result in placing his/her health in serious jeopardy, or suffer serious impairment to bodily functions, or serious dysfunction of any bodily organ or part. BAH's emergency department visits are broken down into five categories, according to their level of severity. The services provided for visits with levels of severity ranging from 1 – 3, can be provided in a different venue, at a lower cost. Severity levels 1 and 2 can be treated in a physician's office. Level 3 can be treated in an acute care medical setting (i.e., urgent care clinic).

Table 57 looks at both the overall number of visits, and the number of visits by the WOAHOHP subpopulation for severity levels 1 – 3.

Table 57: Bay Area Hospital Emergency Department Visits by Level of Severity

BAH Emergency Department Visits by Level of Severity			
Emergency Department Service Levels	All Carriers' Cases Combined	WOAH/OHP Cases	WOAH/OHP Percentage of the Whole
Level 1	269	90	33%
Level 2	2431	1022	42%
Level 3	12485	4085	33%

Level 1 cases include suture removal, immunizations, reading TB tests (conditions which could be treated in a doctor's office). **Level 2 cases** include level one cases with a prescription refill, laceration repairs with steri-strips, ear pain, minor viral infections, and urinary frequency without fever (conditions which could be treated in a doctor's office). **Level 3 cases** include minor trauma, medical conditions requiring a prescription, headaches, head injuries without neurological symptoms, dental pain, respiratory illnesses relieved with a nebulizer, and dehydration requiring no more than normal saline for treatment (conditions which could be treated in an urgent care clinic).
Data provided by BAH Interim Performance Improvement/Safety Officer in April, 2013.

Domestic Violence and Sexual Assault Resources

The number of persons served through the Women's Safety & Resource Center (WSRC) is an indicator of the safety issues and stressors faced primarily by women and children. Services for individuals in abusive situations are provided through shelters and housing, outreach programs, education (including support groups) and a crisis hot line. While WSRC clients range in age from small children to senior citizens, 70% fall between the ages of 20 and 50 years. In 2012, 1,406 unduplicated clients were served. 82% of them were female. Over 160 adults and 111 children were provided shelter. Outreach services were provided to 1,078 adults and 5 children, and 156 individuals received assistance through the hotline.

Oral Health

The significant improvement in the oral health of Americans over the past 50 years is a public health success story. Most Americans today enjoy excellent oral health and are keeping their natural teeth throughout their lives. But this is not the case for everyone. Cavities are still the most prevalent chronic disease of childhood. Too many people mistakenly believe that they need to see a dentist only if they are in pain or think something is wrong, but they are missing the bigger picture. A dental visit means being examined by a doctor of oral health capable of diagnosing and treating conditions that can range from routine to extremely complex.

Coos (N=34), Curry (N=3) and Josephine (N=46) Counties have a total of 83 enrolled OHP dentists. According to the 2013 County Health Rankings, the ratio of patient to provider is 1,779:1. The national benchmark is 1,516:1.

As of 2011, over 40% of Coos, Curry and Josephine County residents still had no dental insurance (Table 58).

Table 58: Percent of Coos, Curry and Josephine Residents with Dental Insurance, 2011

Dental Insurance	Region 8*	Oregon
Percent of individuals without dental insurance.	43.4%	34.1%

*Region 8 includes Coos, Curry and Josephine Counties. Data from the 2011 Oregon Health Insurance Survey

Adult Dental Care

Adults Using the Emergency Department at BAH for Dental Services

Adults who are enrolled in the OHP are using the BAH Emergency Department for urgent dental services (primarily receiving pain pills and antibiotics). They may have the belief that no dental services are

covered for adults on the OHP standard plan. However, the OHP standard plan does include a \$100 benefit for emergency dental services, which may be accessed through the OHP client's assigned OHP dental provider.

Table 59: Adult Use of Bay Area Hospital Emergency Department for Dental Services

Adult Use of Emergency Department for Dental Services			
	2010	2012	Increase or decrease from 2010 to 2012
Total number	741	622	-119
Medicaid Capitated	197	205	+8
Insurance	85	81	+4
Open card Medicaid	65	42	-23
Medicare	55	59	+4
Charity	30	41	+11
Self-pay	309	194	-115

Source Unknown

The decrease in the self-pay category from 2010 to 2012, shown above, may be due to the Oregon Coast Community Action (ORCCA) emergency dental program, which provided \$50,000 worth of services (primarily extractions) in 2012.

Emergency Dental Days

Emergency Dental Days are set up through a partnership between Oregon Coast Community Action and Advantage Dental. Emergency Dental Day clinics are intended to address urgent dental needs for adults without dental insurance. The major service provided is extractions (one per client, per month), but other services are sometimes available. The Dental Days are staffed with volunteer dentists and hygienists, and take place on the first Friday of every month. As of April 2013, a maximum of 11 clients can be scheduled for each clinic. The schedule fills quickly, often more than a month in advance.

Other Dental Assistance

The Waterfall Clinic provides dental cleanings, sealants and fluoride treatments on a sliding fee scale. The Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Clinic provide dental services to tribal members and other eligible individuals. Umpqua Community Health Center in Roseburg will perform dental work on a sliding fee scale for Coos County residents.

Child Dental Care

Dental decay remains a significant problem for Oregon's children. Only 34.4% of Oregon mothers report that after their new baby was born, a doctor, nurse, or other healthcare worker talked with them about how to prevent their baby from getting tooth decay (Oregon PRAMS, 2008). Fortunately, just 9.5% of mothers report that they put their baby to bed with a bottle. According to the *Oregon Smiles Survey* (2012), nearly half of children ages 6 to 9 years of age already had a cavity. One out of every 5 in this age group has untreated tooth decay and 1 out of 7 has rampant tooth decay (i.e., 7 or more teeth with decay).

Table 60: Percent of Youth Who Saw a Dentist in the Past 24 Months in Coos County and Oregon, 2008

Dental Visits	Coos County		Oregon	
	8th grade	11th grade	8th grade	11th grade
Percent of youth who saw a dentist or dental hygienist in the past 24 months.	81%	87.7%	81%	--

"--" indicates this data was not available. OHT 2008

Ready to Smile

Ready to Smile (RTS) is a program funded through The Oregon Community Foundation and administered by Coos County Public Health. The mission of this program is to improve children’s dental health in Coos and Curry Counties. The RTS program ensures that children grades 1, 2, 6 and 7 are educated about oral hygiene, given preventive care, screened for common dental problems and referred to a dentist when necessary.

In school year 2012-2013, RTS screened 1,909 students and provided 2,055 dental kits. In addition, RTS applied varnish on 1,404 students and applied sealants to 10,194 teeth.

Emergency Dental Needs in Children

An estimated 1% of children enrolled in schools in Coos and Curry Counties have emergent dental needs, according to screening conducted by Dane Smith, DDS.

Quality of Care

Quality of care has been defined as the right care, for the right person, at the right time. The Institute of Medicine defines the quality of healthcare as the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with professional knowledge. Six characteristics of quality care are listed: safe, timely, effective, efficient, equitable, and patient-centered.

Preventive Services: Screenings and Immunizations

Table 61: Percent of Coos County and Oregon Residents Who Received Preventive Services

Preventive Screening Measures	Percent Screened	Coos County	Oregon	Healthy People 2020 Objective
Cholesterol Screening	% of adults (≥18 years old) who reported having their cholesterol levels checked within the past 5 years.	73.5%	73.1%	82.1%
Colorectal Cancer Screening	% of 50 - 75 year-olds who reported having a fecal occult blood test (FOBT) in the past year, or a colonoscopy/ sigmoidoscopy within the past five years.	65.7%	61.2%	70.5%
Diabetic Screening	% of diabetic Medicare enrollees that received HbA1c screening in past year.	85.0%	85.0%	71.1% (of all adult diabetics, twice a year)
Mammography Screening	% of women 50 - 74 years old who had a mammogram within the past two years.	76.2%	79.7%	81.1%
Papanicolaou Test (PAP Smear) Screening	% of women 21 - 65 years old (with a cervix) who had a PAP test within the past three years.	74.9%	84.4%	93.0%

County Health Rankings. (2013). Retrieved from: <http://www.countyhealthrankings.org/app/oregon/2013/coos/county/outcomes/overall/snapshot/by-rank>; HealthyPeople.gov.(2013, March 8). Retrieved from: <http://www.healthypeople.gov/2020/topicsobjectives2020/>

Anticipated Short-term Community Healthcare Needs

While many resources currently exist to serve the healthcare needs of all or parts of the population, there are some anticipated needs that will arise over the course of the next 12 months or less. Data are a useful tool for identifying trends and potential issues of concern; however, through analysis it is often necessary to look at other factors that may influence the quality of the data. In addition, it is important to also recognize data that were not captured through the data collection process. To address these issues, a Forces of Change Assessment was completed to identify forces that are occurring or will occur that will affect the community or the local public health system. These forces are identified below and are addressed in the gap analysis beginning on page 50.

- July 2013, ≈1,000 layoffs are anticipated in Coos County
- Due to the expansion of the Medicaid program effective January 2014, it is estimated that approximately 5,000 people that previously had no health insurance coverage will be added to the Oregon Health Plan in Coos County (Appendix B)
- Coos County is providing a large amount of physical healthcare services to clients residing in northern Curry County and Reedsport (Douglas County), which is not considered in the data analysis completed by the Oregon Office of Rural Health
- Funding of healthcare in the future

Places to Recreate

Parks and Beaches

There are several parks in Coos County. The parks include, but are not limited to Hauser Dune Tract, Sandy Creek Covered Bridge, LaVerne, Riley Ranch, Nesika, Rooke Higgins, West LaVerne, HamBunch-Cherry Creek, Forna, Bennett, Rock Prairie, Windy Hill, Lakeside Dune, Saunders Lake Boat Ramp, Doris Place Boat Ramp, Charleston Fishing Pier, Middle Creek, Sandy Creek Covered Bridge, Coquille Boat Ramp, Wallace Dement, Arago Boat Ramp, Riverton Boat Ramp, Judah Parker, Rocky Point Boat Ramp, Bradley Lake Boat Ramp, Johnson Mill Pond, Seven Devils State Recreation Site, Tenmile Lake, Powers, Shore Acres Botanical Gardens State Park, Golden and Silver Falls State Natural Area, Cape Argo State Park, Bandon State Natural Area, Hoffman Memorial State Wayside, and Coquille Myrtle Grove State Natural Site. Some of the local beaches are Sacchi, Bastendorff, North, Lighthouse, Whisky Run, Sunset Bay State Park and Bullards Beach State Park.

All parks in Bandon are smoke-free. Mingus Park, located in Coos Bay, is the only other smoke-free park in Coos County. Most parks, if not all, have designated walking/biking paths or open space for physical activity.

Walkable/Bikable Community

As it becomes widely accepted that a long history of car-oriented community design has contributed to many of America's health problems, especially obesity, more policy initiatives are aiming to promote pedestrian-friendly communities. This trend recognizes that a community's walkable atmosphere is greatly impacted by its official policies, which in the past have promoted a sedentary lifestyle. An about-face in policy can encourage physically active lifestyles. Local level efforts that seek to change public policy to support healthier communities by making them more walkable and bikeable are an easy and reasonably affordable way to improve the health and economy of a community. The goal is for physical activity to become an integral part of people's daily routines, whether that means biking to work, walking to school, or hiking on a trail for pleasure.

Places of Faith

Collectively, faith-based organizations spend between \$15 and \$20 billion annually in privately-raised funds on social services, in addition to providing millions of volunteer hours. A close look at existing evidence reveals that despite their broad involvement in services, most faith-based organizations are not active in community development. Congregations, in particular, typically approach their service activities in a manner that appears poorly matched to current community development practice. However, specific examples illustrate that when they do become involved in community development, they can achieve significant impacts. Faith-based organizations can also provide indirect support for community development through their social investments.

Faith-based organizations primarily focus on providing human services and health-related programs. In human services, the most frequently offered are youth programs (including camps), marriage counseling, family counseling, and meal services or food kitchens. Visitation or other supports for sick persons and shut-ins are the most widespread health-related activities. When one looks in more detail at specific activities, the most common ones are food programs, housing/shelter, and clothing. Only 18% of congregations participate in any type of housing program, which is the most common community development activity, and only 1% engages in employment-related programs.

In Coos County, there are several religious faiths represented, but only 24.3% of the population self-identifies as religious (Table 62). Nationally, 48.8% self-identify as religious.

Table 62: Religions Represented in Coos County by Percent that Self-Identify

Religion	Coos County
Other Christian	7.67%
Latter-Day Saints	4.43%
Catholic	4.22%
Baptist	2.22%
Pentecostal	1.96%
Lutheran	1.89%
Methodist	0.66%
Presbyterian	0.64%
Episcopalian	0.57%
Eastern	0.05%
Jewish	0.00%
Islam	0.00%

Sperling's Best Places. (2013). Religion in Coos County, Oregon. Retrieved from: <http://www.bestplaces.net/religion/county/oregon/coos>

Summary

A community effort was made to assess the current health status and needs of Coos County. Healthcare, community-based and local public health organizations from around the county worked to identify data at the local, state and federal level that they felt was necessary to understanding the health status of Coos County. In addition, they sought out national benchmark goals in an effort to identify where disparities existed between county residents and the U.S. as a whole. Once the data were collected, they were reviewed and discussed by the team of community stakeholders. The stakeholders noted some areas of strength in the assessment. For example, Coos County youth and adults tend to be more physically active than other Oregonians. In addition, hospital resources are readily available to residents. However, some areas for improvement were also identified. While almost every area that was assessed could be improved, the stakeholders worked to identify those areas with the greatest need and with the resources available to address the issues. Eight key areas were identified as needing improvement. Once the eight areas were identified a Strength, Weakness, Opportunity and Threat (SWOT) analysis was done to better gauge where the gaps existed within each area. The intent of the SWOT analysis was to set the foundation for the Health Improvement Plan. The eight areas and results from the SWOT analysis are described in Table 63.

Table 63: Coos County Priority Areas and Gap Analysis Results

Priority Area	Priority Area ~ Gap Analysis			
	Strength	Weakness	Opportunity	Threat
Access to healthcare	<ul style="list-style-type: none"> • Radiation Center, Oncology Clinic, and Cardiac Unit • Fewer uninsured people • Area FQHC, CHCs and SBHCs • Critical Access Hospitals • Nursing homes • Care management • Memory care • SWOCC – educating future healthcare industry workers 	<ul style="list-style-type: none"> • Lack urgent care • Low pay for providers • Rural location • National Health Services Corp shortage • Timely access • Individual compartmentalization 	<ul style="list-style-type: none"> • Telehealth • Recruiting new providers • J1 waiver: foreign-trained providers • Care management • Student/residency programs for RNs, NPs, PAs, MDs • Different models for healthcare delivery 	<ul style="list-style-type: none"> • Provider shortage • Costly recruitment • Larger communities competing for and more attractive to providers, and have historically held the market • Lower income for providers • Lack of specialty care • Socioeconomic status • Public transportation • High liability costs to provide transportation for clients

Priority Area	Strength	Weakness	Opportunity	Threat
Chronic illness management	<ul style="list-style-type: none"> • Home health agencies • Dialysis/wound management • Care management • Diabetic education through Bay Area Hospital • Collaborative effort to decrease hospital readmissions 	<ul style="list-style-type: none"> • Individual weakness to manage health issues (self-care) • Rates of chronic conditions in Coos/Curry County • Burden on physicians • Lack continuous flow of communication, which allows people to fall through the cracks resulting in ED visits/readmits • Dementia patients with no affordable place to go for long-term care 	<ul style="list-style-type: none"> • Living Well with Chronic Conditions program and similar programs • Streamline chronic illness management programs • Identify common goals for organizations that want to collaborate • Diabetic education through Southern Coos Hospital • Cancer treatment navigator 	<ul style="list-style-type: none"> • Non-compliant patients • Schools nursing capacity on decline • Multi-generational families with chronic conditions • Changing federal & state rules that create problems for end-of-life care
Chronic illness prevention	<ul style="list-style-type: none"> • Funding for tobacco initiation and use prevention 	<ul style="list-style-type: none"> • Clear vision/ plan • Funding for policy development; physical activity/nutrition and built environment; sustainable quality programs • Sustainability • Link education to schools • Grocery store displays/ marketing strategies • Lack of nutrition expertise 	<ul style="list-style-type: none"> • New funding streams • Untapped expertise • Eliminate food deserts • Peer support • Health in all policies • Worksite wellness programs • SNAP & EBT @ Farmers Markets • SWOCC – community would benefit from a new workforce trained/educated in community healthcare 	<ul style="list-style-type: none"> • Local culture • Built environment • Funding doesn't support prevention • Lack of support for healthy foods in schools • State stops promoting healthy choices
Dental health	<ul style="list-style-type: none"> • Private funding (<i>Ready to Smile</i>) • Cavity Free Kids • Advantage Dental 	<ul style="list-style-type: none"> • Need exceeds service availability • Diet and nutrition 	<ul style="list-style-type: none"> • OHP expansion • Expand models • WIC-Dental linkage • Personal dental hygiene 	<ul style="list-style-type: none"> • Medicare does not cover dental

Priority Area	Strength	Weakness	Opportunity	Threat
Fall prevention	<ul style="list-style-type: none"> Fall prevention programs at acute & long-term care settings Personal alert systems (for when falls occur) 	<ul style="list-style-type: none"> Lack collaborative effort by community 	<ul style="list-style-type: none"> Community-based fall prevention programs Personal knowledge of how to use assisting devices 	<ul style="list-style-type: none"> Increased proportion of older adults in Coos County Limited resources Home bound Lack of family support
Maternal and child health	<ul style="list-style-type: none"> Head Start Title X Midwives Home visiting programs MOMS Breastfeeding programs No-cost pregnancy testing BCHC & FQHC WIC Children's Relief Nursery 	<ul style="list-style-type: none"> High percent of tobacco use among pregnant women Low birth weight Births to women < 19 years of age Births to unwed mothers High rates of fetal mortality 	<ul style="list-style-type: none"> Preventing unintended pregnancies Access to prenatal care (1st trimester) Preventing preterm labor Food insecurity/nutrition Promotion of services for programs Healthy Start 	<ul style="list-style-type: none"> Family support
Mental health	<ul style="list-style-type: none"> Well-coordinated services between Coos County Mental Health and other service providers CaCoon home visiting program Nancy Deveraux Center Children's Advocacy Center 	<ul style="list-style-type: none"> Provider shortage Recruiting Need exceeds capacity Serving outlying rural areas (e.g., Myrtle Point, Powers) Housing Local care for children who require higher levels of care 	<ul style="list-style-type: none"> Peer support Integrate child psychologist into clinics Better treatment options (medications and evidence-based program) Integrate care for children 	<ul style="list-style-type: none"> Lack social/parental support Access to providers for people not on OHP Stigma Higher levels of care becoming less available statewide for children and adults Intergenerational poverty Rates of domestic violence, child abuse, and substance abuse
Socioeconomic disparities	<ul style="list-style-type: none"> OHP Local food cupboards Safety net clinics Churches with fresh food THE & Bay Area Mission (homeless housing) ORCCA SWOCC and their partnerships with other education institutions 	<ul style="list-style-type: none"> Programs focus on symptoms not root cause Getting new businesses here Helping students be successful (e.g., graduate) 	<ul style="list-style-type: none"> Linking services (e.g., WIC and SNAP) Tying education to local industry needs Chamber of Commerce working on jobs City Managers and Parks & Recreation working on developing safe places to live and recreate (e.g., parks, bike-ways, walking paths) 	<ul style="list-style-type: none"> Economic environment Lack of affordable housing Multigenerational poverty Low education attainment

It is often beneficial to perform checks and balances to ensure alignment with State and Federal efforts; particularly, since funding is often more readily available when strategies and goals are aligned. Oregon has identified three priority areas:

- Goal I: Achieve health equity and population health by improving social, economic and environmental factors
- Goal II: Prevent chronic disease by reducing obesity prevalence, tobacco use and alcohol abuse
- Goal III: Stimulate linkages, innovation and integration among public health, health systems and communities

To keep pace with emerging public health challenges and to address the leading causes of death and disability, the Centers for Disease Control and Prevention (CDC) initiated an effort to achieve measurable impact quickly in a few targeted areas. CDC's Winnable Battles are public health priorities with large-scale impact on health and with known, effective strategies to address them. There are 10 Winnable Battles that have been chosen based on the magnitude of the health problem and their ability to make significant progress in improving outcomes. Seven of the Winnable Battles are describe in Table 64. The remaining three Winnable Battles are focused on global health and not relevant to this assessment.

Table 64: CDC's Winnable Battles and Evidence-based Policy Interventions

Priority	Evidence-based Policy Interventions
Food Safety	<ul style="list-style-type: none"> • Improve detection of food-borne illness
Healthcare-associated Infections	<ul style="list-style-type: none"> • Establish surveillance systems • Increase prevention in non-hospital settings
HIV in the U.S.	<ul style="list-style-type: none"> • Increase HIV testing for all Americans • Assure access to comprehensive sex education for persons with negative HIV status
Nutrition, Physical Activity, and Obesity	<ul style="list-style-type: none"> • Create programs that bring local produce to schools, businesses, and low-income communities • Expand access to parks and recreational facilities
Teen Pregnancy	<ul style="list-style-type: none"> • Reduce cost barriers to family planning services
Tobacco	<ul style="list-style-type: none"> • Increase the price of tobacco products • Require smoke-free environments
Motor Vehicle Injuries	<ul style="list-style-type: none"> • Enforce seat belt usage • Establish graduated drivers licensing

CDC. (2013). Winnable Battles; Society for Public Health Education. (n.d.). Guide to Effectively Educating State and Local Policymakers.

Identified Health Needs

As a result of the gap analysis conducted on the eight areas identified by the community stakeholders, goals have been identified in each of the priority areas (Table 65). These goals will be the foundation of the Community Health Improvement Plan. The Community Health Improvement Plan will expand upon the goals by outlining specific objectives, measures and timelines.

Table 65: Coos County Priority Areas and Identified Goals for Improving Health

Priority Areas	Goals
Access to Healthcare	<p>Goal 1: Increase the proportion of persons with health insurance</p> <p>Goal 2: Increase the proportion of persons with a usual primary care provider</p> <p>Goal 3: Increase the number of practicing primary care providers in Coos County</p> <p>Goal 4: Increase the proportion of persons who obtain necessary medical care</p> <p>Goal 5: Increase the access to urgent care services</p> <p>Goal 6: Explore healthcare system models that improve health in rural communities</p> <p>Goal 7: Increase public transportation throughout the county</p>
Chronic Illness Management	<p>Goal 1: Improve management of chronic illnesses in Coos County</p> <p>Goal 2: Develop a communication system that prevents patients from falling through the cracks within the Coos County health system</p> <p>Goal 3: Improve end-of-life housing and services</p> <p>Goal 4: Increase school nursing capacity</p> <p>Goal 5: Improve health outcomes among persons with chronic illnesses</p>
Dental Health	<p>Goal 1: Prevent caries by reducing the proportion of dental caries experience in primary or permanent teeth</p> <p>Goal 2: Reduce the proportion of untreated dental decay</p> <p>Goal 3: Increase the proportion of adults who receive preventive interventions in dental offices</p> <p>Goal 4: Increase opportunities for Medicare-eligible patients to receive dental care</p> <p>Goal 5: Increase the proportion of children, adolescents and adults who used the oral health system in the past year</p> <p>Goal 6: Increase the proportion of oral health programs at Coos County Public Health and Waterfall Clinic</p> <p>Goal 7: Improve oral health education</p>
Fall Prevention	<p>Goal 1: Prevent fall-related injuries and deaths among adults aged 65 and older</p>
Maternal and Child Health	<p>Goal 1: Increase the proportion of pregnant women who receive early and adequate prenatal care</p> <p>Goal 2: Increase abstinence from alcohol, cigarettes, and illicit drugs among pregnant women</p> <p>Goal 3: Increase the proportion of pregnancies that are intended</p> <p>Goal 4: Improve family support systems</p> <p>Goal 5: Increase access to nutritious foods</p> <p>Goal 6: Decrease prevalence of communicable diseases</p> <p>Goal 7: Ensure kids are ready to learn by kindergarten</p>
Mental Health	<p>Goal 1: Improve early detection of mental health conditions</p> <p>Goal 2: Increase access to mental health care</p> <p>Goal 3: Improve health outcomes among the chronically mentally ill</p>
Chronic Illness	<p>Goal 1: Decrease tobacco initiation among youth</p>

<p>Prevention</p>	<p>Goal 2: Increase opportunities for physical activity Goal 3: Improve nutrition Goal 4: Increase the number of policies for the built environment that enhance access to and availability of physical activity opportunities Goal 5: Promote and support a viable recreation and tourism program Goal 6: Increase the proportion of elementary, middle and senior high schools that provide comprehensive school health education to prevent health problems Goal 7: Improve opportunities for healthy worksites Goal 8: Improve linkage between post-secondary education programs at SWOCC to workforce needs of the community</p>
<p>Socioeconomic Disparities</p>	<p>Goal 1: Increase proportion of employed year-round, full-time people Goal 2: Increase use of alternative modes of transportation Goal 3: Reduce food insecurity and improve nutrition Goal 4: Increase the proportion of the population that completes high school education Goal 5: Increase the proportion of youth and adults who meet current Federal Physical Activity Guidelines for aerobic physical activity and for muscle-strengthening activity Goal 6: Increase the proportion of adolescents who are connected to a parent or other positive adult caregiver Goal 7: Increase the proportion of children with disabilities birth through 2 years, who receive early intervention services in home or community-based settings Goal 8: Increase tobacco screening in healthcare settings Goal 9: Promote health in all policies Goal 10: Restore responsibility and accountability</p>

Acronym Definitions

ACSC	Ambulatory Care Sensitive Conditions
AFTT	Adult Failure to Thrive
AI/An	American Indian and Alaska Native
AIDS	Acquired Immunodeficiency Syndrome
APD	Aging and People with Disabilities
ATOD	Alcohol, Tobacco and other Drugs
BA	Bachelor of Arts
BAH	Bay Area Hospital
BRFSS	Behavioral Risk Factor Surveillance System
BS	Bachelor of Science
BSN	Bachelor of Science in Nursing
CCNBCHAS	North Bend City/Coos-Curry Housing Authorities
CCTP	Coos County Transportation Plan
CDE	Certified Diabetes Educator
CHA	Community Health Assessment
CHES	Certified Health Education Specialist
CHIP	Community Health Improvement Plan
CHR	County Health Rankings
CHS	Contract Health Services
CHSDA	Contract Health Service Delivery Area
CIT	Coquille Indian Tribe
CITCHC	Coquille Indian Tribe Community Health Center
CLRD	Chronic Lower Respiratory Disease
CMS	Centers for Medicare and Medicaid Services
CT	Computerized Tomography
DHS	Department of Human Services
DRG(s)	Diagnostic-Related Group(s)
DSSURS	Decision Support, Surveillance and Utilization Review System
DTaP	Diphtheria, Tetanus and Acellular Pertussis Vaccine
<i>E. coli</i>	Escherichia Coli Bacteria
EBT	Electronic Benefits Transfer
EOL	End of Life
FOBT	Fecal Occult Blood Test
FPL	Federal Poverty Level
FQHC	Federally Qualified Health Center
FTE	Full-time Employee(s)
HbA1c	Glycated Hemoglobin A1c Test
HepB	Hepatitis B Vaccine
Hib	Haemophilus Influenzae Type B Vaccine
HIV	Human Immunodeficiency Virus
HPV	Human Papilloma Virus
IMRT	Intensity Modulated Radiation Therapy
IPV	Inactivated Polio Vaccine
LPC	Licensed Professional Counselor
MAPP	Mobilizing for Action through Planning and Partnerships
mcg/m ³	Micrograms per Cubic Meter
MMR	Mumps, Measles, Rubella Vaccine

MPH	Master of Public Health
MRI	Magnetic Resonance Imaging
MS	Master of Science
N	Number
ND	Doctor of Naturopathic Medicine
NEP	Nutrition Education Program
OCBR	Oregon Coast Bike Route
OHA	Oregon Health Authority
OHP	Oregon Health Plan
OHT	Oregon Healthy Teen Survey
ORCCA	Oregon Coast Community Action
OSU	Oregon State University
PCV	Pneumococcal Conjugate Vaccine
PET	Positron Emission Tomography
PhD	Doctorate of Philosophy Degree
PRAMS	Pregnancy Risk Assessment Monitoring System
RD	Registered Dietitian
RN	Registered Nurse
RNC	Registered Nurse Certified
RTS	Ready to Smile
SBHCs	School-Based Health Centers
SIDS	Sudden Infant Death Syndrome
SNAP	Supplemental Nutrition Assistance Program (formerly referred to as food stamps)
STD	Sexually Transmitted Disease
SWOCC	Southwestern Oregon Community College
SWS – Coos	State of Oregon 2012 Student Wellness Survey - Coos County
U.S.	United States
UTD	Up-to-Date
WIC	Women, Infants, and Children
WOAH	Western Oregon Advanced Health
WSRC	Women’s Safety & Resource Center
YLL	Years-of-Life-Lost

Appendix A: WOAHA Oregon Health Plan Consumer Survey



DOCUMENT APPROVED BY DMAP – CAROL SIMILA, 5/29/2013

Western Oregon Advanced Health

A Coordinated Care Organization

Greetings, Oregon Health Plan Member. This survey is for you to tell us how OHP services can better serve your health needs and goals. This information will help WOAHA (Western Oregon Advanced Health), the local CCO (Coordinated Care Organization) for Coos County, to improve OHP services in the future. Your benefits will remain the same at this time. Do not sign your name, unless you want to be contacted for follow-up. You can mail the survey to WOAHA using the returned envelope provided for you.

1. What kinds of things motivate you to try and be healthier? (Please mark your top 2-3)

- Having enough energy to do the things I enjoy
- Being there for my friends/family in the future
- Being able to work or have a job/fulfill my responsibilities
- Keeping my current health problems from getting worse
- Feeling good/better about myself
- Wanting to live longer
- Having less experience of pain
- Feeling in more control of my life
- Not sure
- Other: _____

2. Are you interested in making changes in any of these areas? (Mark your top 2-3)

- Quitting smoking/tobacco use
- Cutting down/stopping my alcohol use
- Exercising more
- Losing weight
- Reducing time spent watching TV/video games/online activities
- Getting better control of my blood sugar (if you have diabetes or pre-diabetes)

- Taking prescription medicine on a more regular basis to control a health problem
- Lowering my blood pressure
- Eating healthier
- Cutting down on the amount of stress in my life
- Dealing with depression and/or loss in my life
- Dealing with overuse of pain medicine or other addictive drug
- I am happy with my health where I am right now
- Other: _____
(over)

3. What kind of things might be most helpful for you to meet your health goals?

- Class/educational information. What kind?

- More regular contact with a health professional. What kind?

- Help from a friend or family member
- Individual "coach" to work with me on my goal
- Support group of others trying to achieve same goals
- Having better transportation so I could _____
- Having a little more money so I could _____
- Getting a bonus/reward for meeting my health goals
- Unsure
- Nothing. I just need to do it.
- Other: _____

4. If OHP were to provide incentives or rewards for achieving or maintaining your health goals, what would you find the most attractive? (Choose 2)

- Movie tickets
- Taxi voucher
- Cash
- Fuel/gas card
- Grocery store credit
- Day care
- Health Club membership

Other: _____ Don't want anything

5. Do you ever have problems getting in to see your health care provider? If yes, please describe:

- Often can't get an appointment that is convenient for my schedule
- I have to wait too long to get an appointment when I am really sick
- I don't have transportation I can count on to take me to my appointment
- Don't have child or dependent care and can't take them with me
- Other: _____

6. Have you ever gone to the emergency department for a problem that could have been treated at the doctor's office? Yes No If yes, please give the reason:

7. Please select the zip code area in Coos County closest to where you live:

- Bend
- 97420 Coos Bay/ Charleston 97449 Lakeside 97459 North
- 97458 Myrtle Point 97411 Bandon 97466 Powers
- 97423 Coquille Other: _____

8. The following is a list of things that have been found to help some people meet their health goals. Please check the ones in your community that you think would be helpful for you.

- Access to healthy foods, such as Farmers Markets
- Parks and walking trails
- Community spirit that responds to community needs
- Spiritual support from churches
- Local hospitals
- Medical clinics with adequate health services
- Coos County Health Department Services
- Enough Police officers
- Activities for kids, such as Sports, Boys and Girls club, school activities, etc
- Living Well with Chronic Conditions* classes
- Classes provided by Hospital:

(describe: _____)

- OSU Extension classes

(describe: _____)

- Activities for adults and older people
- Economy and jobs
- Other:

9. Please describe your insurance status: (check all that apply)

- I am enrolled in OHP.
- My child is enrolled in OHP.
- I have insurance through an employer or personal medical plan.
- I have no health insurance.
- I am on the waiting list for OHP.
- I have Medicare.

The following information helps us know who we contacted:

10. Please describe yourself: Female Male

11. Age: under 18 18-30 31-50 51-64 65 or older

12. Education-- Highest Level Reached: high school graduate or GED Some college, no degree

associate's degree bachelor's degree or higher still in high school dropped out of school

13. Race:

white Black American Indian Alaskan Native
 Asian HI/Pacific Islander Other

14. Ethnicity: Hispanic Non-Hispanic

15. Are there other concerns about OHP that you have? Please give us any other comments or suggestions for changes here

(Over)

Return this survey in the enclosed envelope to:
Western Oregon Advanced Health
P.O. Box 1096 Coos Bay, OR 97420.

If you need this survey in an alternate format or if you have any questions, please contact WOAHA Customer Service at (541)269-7400 or toll free 1-800-264-0014, TTY 711-or 1-877-769-7400, or you can drop off the survey at customer service located at 186 N 8th, Coos Bay.

February 25, 2013

Appendix B: Coos County Health & Care Profile for Newly Eligible Oregonians

Coos County Service Area

Health & care profile

for newly eligible Oregonians under the ACA

OVERVIEW

CONTENTS: This document profiles health and utilization measures of uninsured people up to 138% of Federal Poverty Level as of 2012 in the Coos County Service Area.

SOURCE OF DATA: This profile was produced using survey data from the Oregon Health Insurance Experiment (OHIE). As the first ever randomized controlled trial on the impacts of health insurance, the OHIE has been longitudinally following tens of thousands of low-income Oregonians who signed up for the Oregon Health Plan “lottery.” Because most of these individuals are still uninsured and have already sought Medicaid coverage, they represent a population of likely “early adopters” once Medicaid expansion goes into effect in 2014.

The profile for the Coos County Service Area is based on **891 UNIQUE INDIVIDUALS** from the OHIE’s 2010-2012 data collection period. All participants were uninsured as of their most recent survey, projected to fall within Medicaid age limits at the start of 2014, and are currently living in a zip code that falls within the Coos County Service Area.

PROFILE TYPES: We relied on each individual’s most recent survey response for variables that were time-sensitive. Using this data, we provide three types of information:

1. HEALTH PROFILES, including chronic condition prevalence, and
2. UTILIZATION PROFILES, capturing current levels of utilization while uninsured.
3. DEMOGRAPHIC PROFILES, including race, education, income, and family composition.

1. HEALTH PROFILE

CHRONIC CONDITIONS: Analysis of survey data provides estimates of chronic condition prevalence among the Medicaid-eligible population. These data are best seen as conservative estimates because they rely on having received a diagnosis, which implies at least some access to care. Results suggest that depression/anxiety and high blood pressure are fairly common chronic health conditions among this population. Only a third of incoming has never been diagnosed with any of the listed conditions. It is also fairly common for individuals with a given condition to not be taking prescribed medications for it.

CHRONIC CONDITION DIAGNOSES

CHRONIC HEALTH CONDITIONS <i>Have you ever been told by a health professional that you have...</i>	PERCENT TOLD THEY HAVE IT BY A PHYSICIAN (n = 891)	OF THOSE, PERCENT CURRENTLY TAKING MEDICATION FOR IT
Diabetes	13.7	62.0
High cholesterol	26.2	46.6
High blood pressure	35.1	61.0
Depression/anxiety	42.6	52.0
Asthma	20.1	67.4
Emphysema/COPD	10.6	53.2
Heart attack/Angina	7.8	43.5
Congestive heart failure	0.8	71.4
Kidney problem	6.2	34.5
Cancer	4.5	n/a
Never diagnosed with any of the above	29.3	n/a

OTHER HEALTH INFORMATION: The surveys also collected some other general health information, including self-assessments of overall health and health trajectory, impairment and ability to work, a short clinical screen for current depression (Patient Health Questionnaire-2; PHQ-2), as well as smoking status. Results are summarized below.

GENERAL HEALTH PROFILE

OTHER HEALTH MEASURES	Percent
Overall Health: Poor or Fair	48.6
Health Trajectory: Health getting worse over the last 6 months	36.0
Percent Whose Health Currently Limits Ability to Work	42.6
Percent Who Screened Positive for Current Depression (PHQ-2)	35.3
Currently Smoke	49.1

2. UTILIZATION PROFILE

ACCESS TO CARE: Access to care has been poor among this population. Using the most recent year’s data for each individual, we estimate that about four in ten will lack connection to a usual care source, and the majority of those who have recently needed health care say they have been unable to get all the care they need.

RECENT ACCESS TO CARE

ACCESS TO CARE MEASURE	Percent
Percent Who Have A Usual Place Of Care	62.9
Percent Who Have A Personal Doctor	44.8
Of Those Who Needed Care, Percent That Didn’t Get It (last 6 months)	
--Medical Care	68.1
--Mental Health Care	86.7
--Prescription Medications	54.7
--Dental Care	89.3

USE OF OUTPATIENT AND PREVENTIVE CARE: Utilization of outpatient care and preventive screenings are shown below. Rates of screenings for common chronic conditions such as diabetes and cholesterol were moderate, and most women appeared to have both mammograms and Pap tests.

OUTPATIENT UTILIZATION & PREVENTIVE SCREENINGS

OUTPATIENT UTILIZATION	Percent	PREVENTIVE SCREENINGS	Percent
Outpatient Visits in past six months		Have Never Had....	
--None	44.4	--HIV Screening	55.0
--One to two	34.8	--Hepatitis C Screen	60.0
--Three to four	13.8	--Mammogram (female 40+)	24.3
--Five to seven	5.1	--Pap test (female)	4.2
--Eight or more	1.9	--Rectal exam (male 50+)	40.9
		--Diabetes Screening	37.9
Average # of Outpatient Visits (6 Months)	1.49	--Cholesterol Screening	36.5

USE OF ED & ACUTE CARE: Emergency Department visits and inpatient utilization are summarized below. About one in four have used the ED at least once in the past six months, and nearly one in ten had been a hospital inpatient at least overnight.

RATES OF ED USE & INPATIENT STAYS

ED UTILIZATION	Percent	INPATIENT UTILIZATION*	Percent
ED Visits in the Past 6 Months		Hospital Stays in the Past 6 Months	
--None	72.6	--None	92.1
--One	14.9	--One	5.8
--Two	7.6	--Two	1.1
--Three or More	4.9	--Three or More	1.0

*Excludes childbirth

3. DEMOGRAPHIC PROFILE

We have included individuals with incomes above 138% FPL in this analysis. Since their incomes vary, and they may be income eligible for Medicaid in 2014 even if they would not have been at the time of their most recent survey. Results are summarized below.

DEMOGRAPHIC PROFILE

MEASURE	PERCENT	MEASURE	PERCENT
GENDER		EMPLOYMENT	
Female	55.1	Employed	33.6
AGE		Self-employed	7.9
19-34	25.7	Unemployed	53.2
35-49	32.1	Retired	5.3
50-64	42.9	APPROX HOUSEHOLD INCOME (% of FPL)*	
RACE/ETHNICITY		100% and below	64.6
Hispanic	4.6	101%-138%	15.4
White (Non-Hispanic)	87.9	139% and above	20.0
Black or African American	0.6	NUMBER OF DEPENDENTS	
Other (including multiracial or unknown)	7.0	0	64.5
EDUCATION		1-2	28.3
High school diploma or less	74.3	3+	7.2

*Federal Poverty Level (FPL) based on Federal poverty calculation guidelines, found at <http://aspe.hhs.gov/poverty/index.cfm>

CONTACT

Please contact Bill J. Wright, PhD, Senior Research Scientist, 503.215.7184, Center for Outcomes Research & Education, Providence Health & Services, with questions about this document.